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28th biennial report

MONTANA
STATE BOARD OF HEALTH

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Montana State Board of Health

(July 1, 1954 - June 30, 1956)

David T. Berg, M.D., President	Helena
Mrs. Charlotte Holtz (Vice-President)*	Floweree
William F. Morrison, M.D. (Vice-President)**	Missoula
W. E. Beal, D.D.S.***	Anaconda
Paul H. Bowden, D.D.S.****	Butte
B. C. Farrand, M.D.	Jordan
Mrs. George W. Hanson*****	Superior
Mrs. Helen C. Johnson	Bozeman
R. J. Losleben	Malta

G. D. Carlyle Thompson, M.D., Secretary-Executive Officer

* Term ended September 22, 1954
** Elected Vice-President October 2, 1954
*** Term ended June 18, 1955
**** Appointed June 18, 1955
***** Appointed September 22, 1954

The Montana State Board of Health was created by legislative action, signed into law March 15, 1901. Membership of the State Board of Health is detailed by law (Revised Codes of Montana, 1947: Title 69, Chapter 101):

"There is hereby created 'The State Board of Health of the State of Montana' . . . which shall consist of seven (7) members, to be appointed by the governor, three (3) of whom shall have the degree of doctor of medicine, one (1) of whom shall have the degree of doctor of dental surgery, and three (3) of whom shall be lay persons, each of whom has demonstrated intelligent and active interest in the field of public health in Montana. For purposes of this act 'lay person' is hereby defined as any person who does not hold the degree of doctor of dental surgery or doctor of medicine."

This report is presented as required that: "The State Board of Health" "shall at each session of the legislature, submit through the governor a full report of their investigations, and such suggestions and recommendations as they may deem proper . . . they shall gather such information . . . as they deem proper for diffusion among the people."

Biennial Report

JULY 1, 1954 - JUNE 30, 1956

MONTANA
STATE BOARD OF HEALTH

Dr. Cogswell

Public health enjoyed today in Montana is the product of work started over 50 years ago and what we accomplish tomorrow in public health must be based on what is done today - - - - - - - - - - in recognition of one public health worker and his contributions in the state's public health, this report is submitted with tribute to Dr. William F. Cogswell, Montana's State Health Officer for 34 years, 1912-1946.

McKEE PRINT

Staff

July 1, 1954-June 30, 1956

ADMINISTRATION

G. D. CARLYLE THOMPSON, M. D., M.P.H., Executive Officer

R. J. MARQUARDT, Administrative Officer (resigned 4-56)

ROBERT A. JAMES, Administrative Officer (appointed 6-56)

L. L. BENEPE, State Registrar

BACTERIOLOGICAL LABORATORY

EDITH KUHNS, Director

CHILD HEALTH

PAUL R. ENSIGN, M. D., M.P.H. Director (7-54 to 10-55)

KATHERINE E. DAWSON, M. D., Acting Director (appointed 10-55)

WALTER H. HAGEN, M. D., Director Cerebral Palsy Center, Billings

BETTY S. GILSON, M. D., Director Rheumatic Fever Center Great Falls

DENTAL HEALTH

ALLEN T. WILLIS, D.D.S., M.P.H., Director

DISEASE CONTROL

G. D. CARLYLE THOMPSON, M. D., M.P.H., Acting Director (7-54 to 10-55)

PAUL R. ENSIGN M. D., M.P.H., Director (appointed 10-55)

ENVIRONMENTAL SANITATION

C. W. BRINCK, Director

HEALTH EDUCATION

K. ELIZABETH ANDERSON, Director

HOSPITAL FACILITIES

ROBERT J. MUNZENRIDER, Director

LOCAL HEALTH SERVICES

L. S. McLEAN, M. D., M.P.H., Director (resigned 2-56)

E. L. SEDERLIN, M. D., Director (appointed 4-56)

PUBLIC HEALTH NURSING

WAVA L. DIXON, Director

STATE OF MONTANA
STATE BOARD OF HEALTH
HELENA, MONTANA

G. D. CARLYLE THOMPSON, M. D.
EXECUTIVE OFFICER AND SECRETARY

November 30, 1956

Honorable J. Hugo Aronson
Governor of Montana
State Capitol
Helena, Montana

Dear Governor Aronson:

Herewith is submitted the 28th Biennial Report for the Montana State Board of Health covering activities for the two fiscal years beginning July 1, 1954 and ending June 30, 1956. Vital statistics data for the calendar years 1954 and 1955 are being issued separately.

The report reflects a basic fact of public health--that change is an essential element. Moderated demands in one area of activity can permit greater emphasis in another. New scientific knowledge, resulting in new practices and procedures, affects all of the health professions. Thus, in recognition of this newer knowledge, continuous adjustment of the public health program has been an objective in order to do the most effective job of public health in Montana within the limitation of time, finances and staff.

Interest and cooperation by you has been of great assistance in the conduct of public health affairs, and has been appreciated.

Sincerely yours,

G. D. Carlyle Thompson

G. D. Carlyle Thompson, M.D.

Executive Officer

GDCT/bh

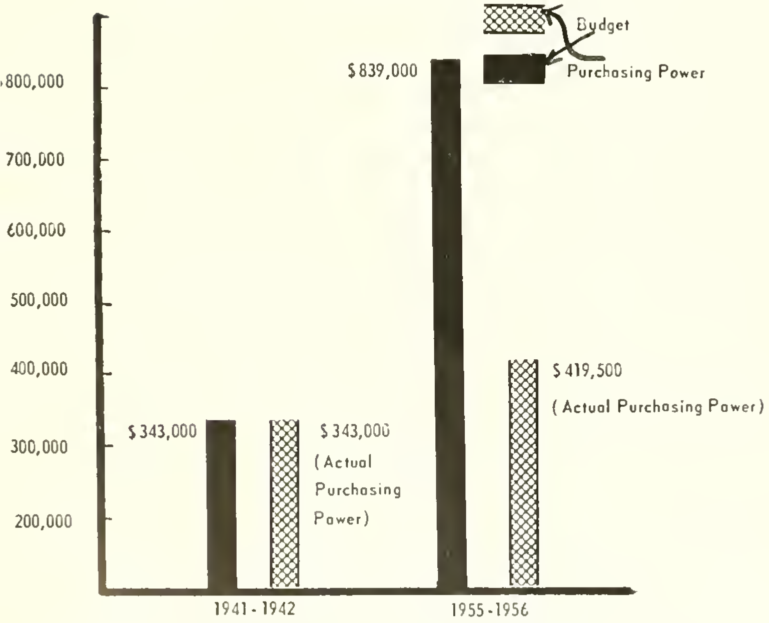
Health and Crippled Children; Polio; Venereal Disease; Indian Health; Stream Pollution and Sewage Disposal. The Federal grant of $140,000 to the state for the polio vaccine program initiated in fiscal 1956 is continuing with $108,000 for fiscal 1957. Thus the original budget from both federal and state funds for the fiscal year 1956 of $642,000 became $839,500 before the end of that year and the budget for fiscal 1957 is $939,700. For fiscal year 1956 an expenditure of $797,000 exceeded the expenditure of $660,800 for the 1955 fiscal year.

For many years, the major part of Montana's public health budget has been derived from federal funds. At one time 72% of the State Board of Health budget was financed by federal funds.

In recent years, Federal funds have financed almost half of Montana's public health. In only two years has the federal share dropped below the 50% mark. Federal funds accounted for 48% of the budget in 1954 and 49% in 1955.

To put Montana's public health program on a sounder basis for those services needed in the state, a larger percentage of the budget from state funds is required.

STATE BOARD OF HEALTH
ANNUAL BUDGET, PURCHASING POWER*, 1941-1942 and 1954-56



*U.S. Labor Dept. Division of Labor Statistics reports the purchasing power of the dollar has declined more than 50% in the 14 years from 1942 to 1956.

To accomplish this in the utilization of federal public health funds available to Montana during the next biennium, it is estimated that $550,000 state legislative appropriation per year will be needed. This will provide approximately 55% of the total budget from state funds.

Federal and state appropriations are not the whole story of the restricted budget. The decline in purchasing power of the money available is of great significance. Since 1942, the U. S. Bureau of Labor Statistics reports the purchasing volume of the dollar has declined more than 50%.

Personnel: Recruiting to fill professional and technical staff vacancies continues very difficult. Because of this department's inability to compete favorably with the offerings being made by private industry and better salaries in other public health dpeartments, recruiting in some areas is very nearly impossible.

STAFF TURNOVER

	% 1952	% 1953	% 1954	% 1955	% 1956	% Aver.
Professional-Technical	28	41	49	15	23	31.2
Clerical	42	90	70	112	58	74.4

Inadequate salary scales, the 5½ day work week of state offices, shortage of qualified personnel and competition from other private, state and federal offices all have bearing on this staff turn-over.

A new compensation plan, adopted in October of 1955, helped somewhat in reducing this rate of turn-over especially for clerical positions.

Vacancies during this biennium required some staff members to carry multiple responsibilities. This was the condition when there was no physician to serve as disease control officer, no physician to direct the Division of Local Health Services, the Environmental Sanitation Division was short sanitary engineers and sanitarians. Public Health nursing vacancies and clerical and stenographic vacancies forced frequent delays.

In the last five years, the total number of the staff has remained relatively constant. The sharpest change was the reduction of the nine positions between fiscal 1953 and 1954. In other years, the fluctuations have been limited to one to three and those primarily in the clerical staff.

Clerical as well as professional and technical staff should be increased to meet Montana's increasing need for public health, which is only partly reflected in the State's 10% to 15% annual population growth.

Two-thirds of Montana's nurses working in public health in local areas, and most of Montana's sanitarians lack the necessary training or experience in their fields to be considered fully qualified. A few individuals have been given small scholarships to assist in completing their basic public health training. In addition, short basic training courses are conducted by the State Board of Health for these people.

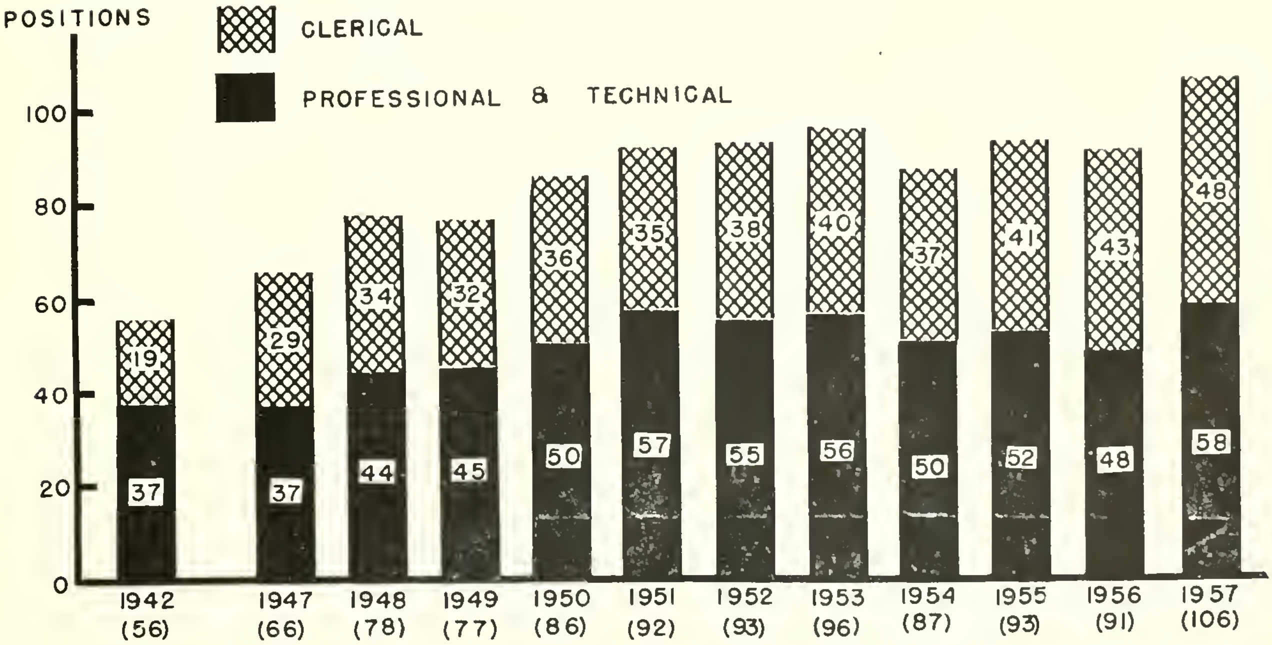
For the first time in five years, (in November of 1955), the position of Director of the Division of Disease Control became a full-time staff position and an Industrial Hygiene engineer was employed. Prior to that date, the executive officer has carried this responsibility on a part-time basis, in addition to his other responsibilities.

There is need for a position on the State Board of Health staff to devote full time to Civil Defense. Health Services of this important program are the responsibility of the State Board of Health of Montana. With no funds available for this activity, civil defense health service activities have been extremely limited. In July of 1956, a three-day, state-wide conference was conducted on Montana Health Services for Civil Defense. From the recommendations developed at this conference, planning is being formulated in close cooperation with related professional groups: physicians, nurses, dentists, hospital administrators, etc.

Office Quarters: In November 1955, the State Board of Examiners directed the State Board of Health to vacate the office space in the Mitchell Building.

At that time, the Division of Disease Control and its chemical laboratory took permanent quarters in the new State Laboratory Building. Space in the Laboratory Building was temporarily assigned to the executive and administrative offices, the Division of Public Health Nursing, the Division of Local Health Services and the Division of Health Education. Temporary housing for the Division of Dental Health and the Division of Child Health Services has been temporarily

MONTANA STATE BOARD OF HEALTH
BUDGETED FULL-TIME POSITIONS
FISCAL YEARS 1942 and 1947 - 1957



assigned in the small, gray "annex" building south and east of the capitol building.

Installation of equipment in the State Laboratory Building, expected early in 1957, will permit the Division of Environmental Sanitation and the Bacteriological Laboratory to assume permanent quarters. They are still located in the old State Board of Health building south of the Capitol. With the installation of required equipment, the virus laboratory will be located in the laboratory building. Montana does not now have a virus laboratory.

When these offices and laboratories are established in the laboratory building the old Board of Health building can be renovated to accommodate some of those divisions now in temporary quarters.

All chemical laboratory work has been coordinated and integrated in the laboratory of the Division of Disease Control in the laboratory building. One chemist concentrates on industrial hygiene activities; the other chemist places the emphasis on work in food, drug, water and stream pollution chemistry.

Office Procedures: New forms, including new birth and registration forms, were developed in this biennium, to permit more effective reporting and efficient clerical procedures.

Considerable savings have been achieved in preparing and producing reports, necessary forms and other printed materials used by the staff. Further savings are expected to be realized in the purchase of paper in bulk, to be cut and prepared for use by the multilithing office.

Modern office machines (card punch equipment and card punch sorter) are being used to the limit of their effectiveness in tabulating and computing vital statistics and other essential statistics. This permits essential statistical information to be made available much faster and at less cost.

Public Health Statistics: Public health statistics are essential in providing information that reflects these changes in the character of the population and the need for adjusting public health to new and greater needs.

Effective and long range public health planning is based on accurate and meaningful interpretation of vital statistics and other public health indicators. Degenerative diseases such as heart disease, cancer and renal diseases now require more attention than was formerly given to the acute communicable diseases.

Entire public health programs have been and will continue to be adjusted on the basis of information gained through studies of public health statistics.

In this biennium the Statistics Section was created to deal with the statistical activities of the State Board of Health. Satistical services are provided by this section for all divisions of the staff. Services include and range from consultation on statistical problems, analysis of statistical data, and interpretation of statistical information in narrative and graphic forms.

Basic tabulations are prepared in this section for use by the Board of Health and the staff divisions. An example of this service is the tabulation of births, deaths, marriages and divorces. Other examples are analysis of the Chest X-ray Survey findings and of the polio vaccination program. To provide the Public Health Nursing division, local nursing supervisors and local public health nurses statistical information on nursing activities, this section prepares monthly tabulations of Nurses' Daily Reports.

Future plans call for the adaptation of the Division of Disease Control cancer register to a modern business machine statistical tabulation system. This will help in making cancer register information more readily available to program directors and Montana physicians.

Modern tabulating equipment utilizing punch cards are used to store statistical information secured from original reports and records.

Vital Records: Complete and accurate registration of all Montana births, deaths, fetal deaths, marriages, divorces, adoptions and legitimations of births, are the responsibility of the Bureau of Vital Statistics. Established by the State Legislaure in 1907, June 1, 1956 marked the start of the 50th year of its service.

A fire-proof vault in the old State Board of Health building houses over 950,000 vital records for Montana. These include: over 520,000 births; over 260,000 deaths and approximately 95,000 marriages; 27,000 divorces; and 55,000 delayed birth registrations.

Detailed data from the Bureau of Vital Statistics are not included in this section of the Biennial report of the State Board of Health. Prepared on a calendar year basis, vital record reports for 1954 and 1955 are available, upon request, from the State Board of Health.

Basic information is provided this office by 74 local registrars in Montana; there are registrars in each of the state's 56 county seats. Eighteen other registrars are located in strategic points in the state, for convenience in reporting and recording births, deaths and fetal deaths. Marriage, divorce and adoption information is supplied by the 56 clerks of District Courts. Local registrars are paid for this service at the rate of 25c for each birth ,death and fetal death reported.

Correspondence, mail-handling and search of records for certification and verification, reached a post-war high in this biennium.

In the calendar years of 1954 and 1955, the number of requests directed to the Bureau of Vital Statistics were 46,722. This represents a 20% increase in the volume of work handled in the previous two-year period. Fees collected for this service are deposited with the State General Fund. These funds amounted to $6,286.00 in calendar 1954 and $7,074.00 in 1955.

In 1954 and 1955, a total of 14,736 certified copies of birth and death certificates were issued by this office, compared with 15,379 certified copies prepared in the previous two-year period.

Verifications, current notification corrections, affidavit corrections and delayed birth certificates filed in 1954-1955 total 9,103, an increase of 14% over the previous two-year total (7,933).

Montana's population is estimated at 660,000 for 1955, a gain of 11.7% since the federal census of 1950. Detailed information on Montana's estimated population growth and detailed information on other statistical information is available in the Annual Vital Statistics report of the State Board of Health for 1954 and 1955.

Montana's death rate for both 1954 and 1955 was 9.3 (per 1,000 ~~100,000~~ population). This is slightly above the national rate (9.2) and is the lowest for Montana since the 9.0 rate of 1923.

Heart, cancer and vascular lesions are, in that order, the leading causes of death in Montana. In 1910, accidents were the leading cause of death with tuberculosis second and pneumonia third.

Advisory Groups: Diagrams in this Central Administration report reflect the relationship of advisory and related groups to the State Board of Health.

Professional assistance has been extended to the State Board of Health through some ten committees of the Montana Medical Association, ranging from maternal and child health studies, to civil defense health responsibilities.

The Dental Advisory Committee of the Montana State Dental Association worked in close cooperation with the Division of Dental Health in a wide area of common interest.

The Advisory Hospital Council appointed by the Governor developed revisions in the hospital and nursing home licensing regulations which were later adopted by the State Board of Health and assisted in developing plans for the most effective use of federal funds available to Montana for assistance on constructing hospitals and medical facilities.

The State Board of Health—Department of Public Instruction Joint Staff Committee permits close cooperation between the departments on problems of common interest.

The Montana Health Planning Council continues to advise the State Board of Health on health-related topics. Indian Health needs, new legislation, care of the handicapped are some of the matters which have been of interest to the council during the biennium.

State Board of Health Representation On Joint Agency Committees and Interdepartmental Councils

ADMINISTRATION BOARD FOR MONTANA CENTER FOR CEREBRAL PALSY AND HANDICAPPED CHILDREN

Montana Society for Crippled Children
Montana State Board of Health
Eastern Montana College of Education
Billings School District

STREAM POLLUTION COUNCIL*

State Engineer
Director Fish & Game Dept.
Exec. Officer—State Board of Health
Lay Members (4) **

CHEST X-RAY SURVEY POLICY COMMITTEE

Montana Div. American Cancer Society
Montana State Board of Health
Montana Tuberculosis Association
(August 1955—Survey Completed)

AGRICULTURE & LIVESTOCK COUNCIL*

Exec. Officer, Livestock Commission
Exec. Officer, Livestock Sanitary Board
Exec. Officer, State Board of Health
Commissioner of Agriculture
Exec. Secretary, Milk Control Board
Exec. Secretary, Poultry Improvement Board

JOINT STAFF COMMITTEE FOR HEALTH OF SCHOOL-AGE CHILD

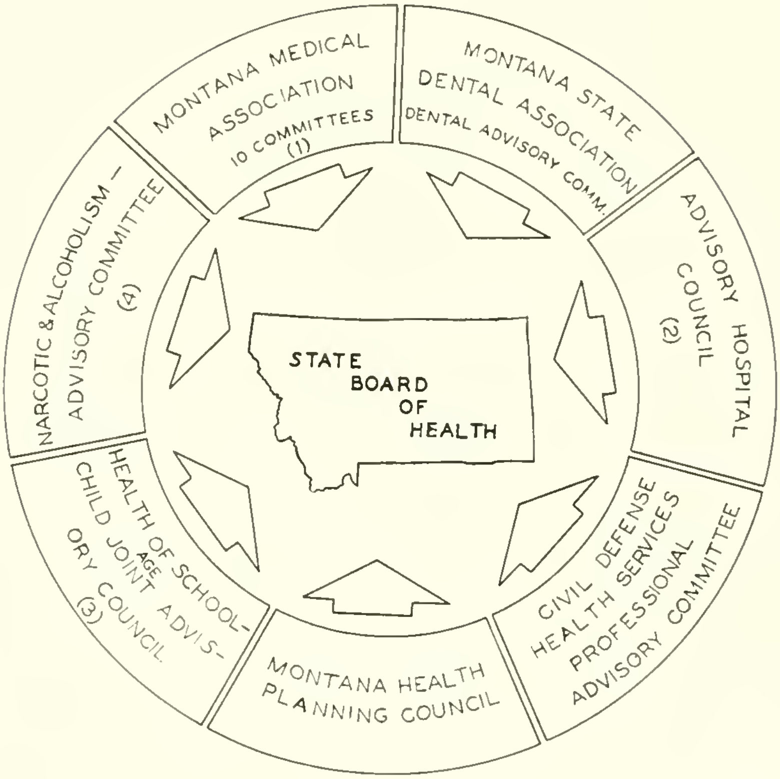
State Board of Health—State Dept. of Public Instruction
And Its Advisory Council (including representatives from eighteen education and health groups)

COUNCIL FOR WELFARE, HEALTH & INSTITUTIONS*

Exec. Officer, State Board of Health
Administrator, Dept. of Public Welfare
Warden, Montana State Prison
President, Industrial School
Supt., Girls' Vocational School
Supt., Montana State Hospital
Supt., Montana State Training School
Supt., Montana State Orphans' Home
Pres., Montana State Tuberculosis Sanitarium
Pres., Montana State School for Deaf & Blind
Supervisor, Home for the Senile Aged
State Controller

* Created by Legislative Action
** Appointed by Governor

Advisory and Related Committees to the State Board of Health


STATE BOARD OF HEALTH
MONTANA MEDICAL ASSOCIATION
10 COMMITTEES (1)
MONTANA STATE DENTAL ASSOCIATION
DENTAL ADVISORY COMM.
ADVISORY HOSPITAL COUNCIL (2)
CIVIL DEFENSE HEALTH SERVICES PROFESSIONAL ADVISORY COMMITTEE
MONTANA HEALTH PLANNING COUNCIL
HEALTH OF SCHOOL-AGE CHILD JOINT ADVISORY COUNCIL (3)
NARCOTIC & ALCOHOLISM — ADVISORY COMMITTEE (4)

1. Includes Cancer, Fracture & Orthopedic, Heart & Rheumatic Fever, Industrial Welfare, Maternal & Child Welfare, Public Health, Tuberculosis, Poliomyelitis, and Emergency Medical Service, Advisory Committees.
2. Appointed by Governor.
3. With State Department of Public Instruction.
4. Created at legislative suggestion.

Public Health Legislation: Montana's 1955 State Legislature enacted the following measures that are of significance to the state's public health:

Placed all State Board of Health employees under the Board's orders and directives; the law also permits internal reorganization of staff, functions and services to provide efficient administrative, professional and technical practices.

Brought Montana's basic Food and Drug Law up to date.

Required Montana physicians to report to local health officers those persons subject to epileptic type seizures and disorders characterized by lapse of consciousness or control. Health officers must in turn report this to the State Board of Health, who must forward the information to the Highway Patrol with recommendations as to licensing of such persons.

Assigned the responsibility for the Montana Uniform Drug Act to the State Board of Pharmacy. It had been a State Board of Health function.

Authorized Montana to use federal funds (available under the Hill-Burton Act) for aid in constructing medical facilities as well as hospitals.

Montana's extended stream pollution law brings under surveillance all pollution. Before this legislation, only pollution affecting Public Health was subject to law. The measure created the State Water Pollution Council, to coordinate pollution abatement and prevention activities. The State Board of Health is the administrative agency for this council.

In the field of public health, Montana is in need of legislation to permit more flexibility in cities and counties organizing local public health programs and departments. This is essential to allow broad population bases for better local financing and more effective public health.

Summary of State Board of Health Expenditures And Encumbrances by Object—Fiscal Years 1955 And 1956—State, Federal and Private Funds

Object	July 1, 1954 June 30, 1955	July 1, 1955 June 30, 1956	Total
Salaries	$358,343.59	$370,239.98	$728,583.57
Travel	66,380.70	39,529.16	105,909.86
Social Security	....	9,242.74	9,242.74
P. E. R. S.	10,205.73	12,124.53	22,330.26
Office Expense	45,337.82	66,303.17	111,640.99
Scientific Supplies	8,131.40	20,513.69	28,645.09
Polio Vaccine Distribution & Use	—	123,402.10	123,402.10
Merit System	6,828.30	7,579.25	14,407.55
Training	8,521.77	4,517.41	13,039.18
Drs. Fees, Clinics & X-Rays	29,365.47	40,564.80	69,930.27
Hospitalization	75,566.94	62,943.14	138,510.08
Appliances	6,969.88	7,065.89	14,035.77
Miscellaneous	1,285.39	4,762.11	6,047.50
Aid to Local Areas	43,855.92	26,318.52	70,174.44
	$660,792.91*	$795,106.49†	$1,455,899.40

* Encumbrances $10,285.86

† Encumbrances $75,017.44

* * *

Montana State Board of Health

TOTAL EXPENDITURES AND ENCUMBRANCES FISCAL YEARS, 1951-56

	1951	1952	1953	1954	1955	1956
ADMINISTRATION	(81,533.74)	(90,461.26)	(107,865.18)	(91,009.34)	(103,188.11)	(128,244.94)
General	51,357.41	62,447.24	73,963.68	65,717.64	68,890.50	89,577.51
Vital Statistics	15,843.64	17 451.48	18,958.68	18,842.06	19,532.62	26,570.74
Merit System	4,376.02	6,123.89	7,308.21	6,449.64	6,828.30	7,579.25
Training	9,956.67	4,438.65	7,634.58	Included in Project Totals	7,936.72	4,517.41
DISEASE CONTROL	(71,885.93)	(79,740.25)	(99,255 31)	(96,488.64)	(111,120.32)	(193,338.91)
General	25,978.15	34,028.15	28,799.27	16,514.39	21,364.73	59,295.28
Polio Vaccine Dist. & Use						123,402.10
Chest X-Ray Survey	45,662.21	44,297.35	69,381.32	79,598.22	89,729.07	9,759.89
Drugs and Biologics	245.57	1,414.45	1,074.75	376.03	326.52	881.64
CHILD HEALTH SERVICES	(138,027.26)	(156,966.81)	(182,816.81)	(199,750.42)	(205,672.61)	(213,381.41)
Maternal & Child Health	11,822.31	16,957.51	31,269.76	34,372.47	31,988.49	48,975.69
Crippled Children	12,529.75	22,086.94	21,826.13	25,015.91	23,641.43	45,486.84
Clinics & Auxiliary Services	33,081.74	36,382.31	38,833.16	33,281.35	28,659.93	38,181.95
Hospitalization	50,142.13	44,604.65	47 254.16	66,677.37	70,619 20	61,584.37
C. P. Center	19,092.53	24,495.64	26,347.88	31,199.02	36,466.97	36,511.08
Rheumatic Fever Center	7,610.24	7,813.50	8,832.60	4,597.92	4,988.87	5,769.91
Appliances	3,448.66	4,628.23	5,452.85	4,606.38	6,307.72	6,841.57
PUBLIC HEALTH NURSING	(26,752.69)	(16,864.43)	(18,183 80)	(23,967.68)	(19,558.03)	(17,128.46)
HEALTH EDUCATION	(26,194.52)	(28,537.64)	(39,334.74)	(33,349.70)	(37,700.11)	(29,060.98)
General	19,752.01	20,621.59	33,744.71	27,293.50	30,975.36	21,360.70
Narcotics Education	6,442.51	7,916.07	5,590.03	6,056.20	6,724.75	7,700.28
ENVIRONMENTAL SANITATION	(43,174.53)	(62,516.46)	(67,955.75)	(59,636.87)	(53,817.52)	(56,791.05)
BACTERIOLOGICAL LABORATORY	(55,549.04)	(53,365.71)	(54,222.12)	(48,125.23)	(47,609.35)	(52,911.25)
HOSPITAL FACILITIES	(17,111.75)	(19,882.34)	(20,975.60)	(16,990.38)	(15,776.53)	(20,730.84)
DENTAL HEALTH	(13,161.61)	(15,064.13)	(14,388.02)	(12,181.77)	(13,497.34)	(16,948.16)
LOCAL HEALTH SERVICES	(62,162.64)	(60,835.28)	(64,058.52)	(55,819.94)	(52,552.96)	(36,570.49)
General	3,632.76	15,008.35	15,853.76	7,911.25	8,697.04	10,251.91
Aid to Local Areas	58,529.88	45,826.93	48,204.76	47,908.69	43,855.92	26,318.58
UNDISTRIBUTED ENCUMBRANCES	(23,659.65)	(19,114.44)				
TOTAL	559,213.46	603,348.75	669,055.91	637,319.97	660,792.91	795,106.49

SUMMARY OF EXPENDITURES AND ENCUMBRANCES, by Sources

	July 1, 1954 to June 30, 1955				July 1, 1955 to June 30, 1956			
	Contributions	State	Federal	Total	Contributions	State	Federal	Total
ADMINISTRATION		(67,051.81)	(36,136.33)	(103,188.14)		(74,822.59)	(53,422.35)	(128,244.94)
General		50,655.29	18,235.21	68,890.50		55,615.08	33,962.46	89,577.54
Vital Statistics		16,396.52	3,136.10	19,532.62		19,207.51	7,363.23	26,570.74
Merit System			6,828.30	6,828.30			7,579.25	7,579.25
Training			7,936.72	7,936.72			4,517.41	4,517.41
DISEASE CONTROL	(42,034.59)	(36,171.57)	(33,214.16)	(111,420.32)	(6,005.86)	(36,484.47)	(150,848.58)	(193,338.91)
General		12,910.19	8,454.54	21,364.73		36,144.20	23,151.08	59,295.28
Polio Vaccine Dist. & Use							123,402.10	123,402.10
Chest X-Ray Survey	42,034.59	23,261.38	24,433.10	89,729.07	6,005.86	340.27	3,413.76	9,759.89
Drugs and Biologics			326.52	326.52		881.64		881.64
CHILD HEALTH SERVICES		(70,216.32)	(135,456.29)	(205,672.61)		(73,255.75)	(170 125.66)	(243,381.41)
Maternal & Child Health		11,938.00	23,059.49	34,988 49		12,176.89	36,798.80	48,975.69
Crippled Children		6,424.02	17,217.41	23,641.43		12,543.14	32,943.70	45,486.84
Clinics & Auxiliary Services		2,620.00	26,039.93	28 659.93		10,885.53	27,296 42	38,181.95
Hospitalization		25,267.33	45,351.87	70,619.20		16,689.46	44,894.91	61,584.37
C. P. Center		23,966.97	12,500.00	36,466.97		20,960.73	15,580.35	36,541.08
Rheumatic Fever Center			4,988.87	4,988.87			5,769.91	5,769.91
Appliances			6,307.72	6,307.72			6,841.57	6,841.57
PUBLIC HEALTH NURSING		(13,228.86)	(6,329.17)	(19,558.03)		(12,707.86)	(4,420.60)	(17,128.46)
HEALTH EDUCATION		(20,717.84)	(16,982.27)	(37,700.11)		(16,806.61)	(12,254.37)	(29,060.98)
General		14,203.59	16,771.77	30,975 36		9,106.33	12,254.37	21,360.70
Narcotics and Alcohol		6,514.25	210.50	6,724.75		7,700.28		7,700.28
ENVIRONMENTAL SANITATION		(39,092.36)	(14,725.16)	(53,817.52)		(41,887.71)	(14,903.31)	(56,791.05)
BACTERIOLOGICAL LABORATORY		(28,150.91)	(19,458.44)	(47,609.35)		(30,475.24)	(22,436.01)	(52,911.25)
HOSPITAL FACILITIES		(15,668.09)	(108.44)	(15,776.53)		(13,647.25)	(7,083.59)	(20,730.84)
DENTAL HEALTH		(8,686 48)	(4,810.86)	(13,497.34)		(12,044.07)	(4,904.09)	(16,948.16)
LOCAL HEALTH SERVICES		(24,072.83)	(28,480 13)	(52,552.96)		(17,374.42)	(19,196.07)	(36,570.49)
General		2,971.15	5,725.89	8,697.04		5,209.49	5,042.42	10,251.91
Aid to Local Areas		21,101.68	22,754.24	43,855 92		12,164.93	14,153.65	26,318.58
TOTAL	42,034.59	323,057.07	295,701.25	660,792.91	6,005.86	329,505.97	459,594.66	795,106.49

PUBLIC HEALTH SERVICE & U. S. CHILDREN'S BUREAU FUNDS

In State Board of Health Budget 1942-57

	Total P.H.S.	General	Hospital	W.P.	V.D.	T.B.	Cancer	Cancer (Special)	Heart	Polio
1957 Budget	231,133.00	65,500.00		10,215.00	3,600.00	19,800.00	12,400.00		14,800.00	107,818.00
1956 Expended	210,497.55	53,438,13	7,083.59			19,725.30	12,980.00		12,751.00	104,519.53
Budget	246,966.43	53,438.13	8,000.00			19,725.30	12,980.00		12,751.00	140,072.00
1955 Expended	96,407.37	51,728.93	108.44		......	19,113.00	12,611.00		12,846.00	
Budget	96,209.31	51,728.93	123.38			18,900.00	12,611.00		12,846.00	
1954 Expended	109.466.52	52,922.66	1,121.68	2,409.65	1.666.65	19,088.76	12,900.57	5,910.79	13,445.76	
Budget	109.590.19	52,922.66	1,245.00	2,410.00	1,666.65	19,088.76	12,900.57	5,910.79	13,445.76	......
1953 Expended	155,483.19	68,949.67	660.00	4,630.00	16,048.38	22,180.52	17,245.43	12,055.21	13,713.98	
Budget	167,624.93	68,949.67	1,905.06	7,039.65	17,709.62	22,181.19	17,290.00	17,966.00	14,583.74	......
1952 Expended	151,327.00	70,812.00	3,297.00	7,262.00	18,030.00	23,863.00	16,271.00		11,792.00	......
Budget	184,929.00	79,891.00	5,202.00	14,302.00	19,072.00	30,806.00	18,412.00		17,244.00	....
1951 Expended	137,964.00	64,965.00	1,448.00	5,217.00	19,347.00	18,510.00	20,995.00		7,480.00	....
Budget	177,137.00	74,152.00	4,500.00	11,019.00	20,388.00	25,452.00	22,757.00		18,868.00	....
1950 Expended	126.907.00	61,024.00	3,027.00	7,700.00	25,471.00	20,779.00	5,821.00		3,085.00	....
Budget	162,431 00	69,162.00	3,000.00	9,619.00	27,083.00	21,678.00	18,466.00		13,423.00	....
1949 Expended	109,978.00	56 563.00	7.00		29,583.00	20,613.00	6,211.00			....
Budget	136,005.00	65,396.00	3,240.00		30,280.00	23,230.00	13,859.00			....
1948 Expended	122,593.00	53,666.00	315.00		28,632.00	34.643.00	5,336.00			....
Budget	152,186.00	64,479.00	7,500.00		30,343.00	36,577.00	13,287.00			....
1947 Expended	88,155.00	47,446.00	4,798.00		18,858.00	13,819.00	3,233.00			....
Budget	128,999.00	58,627.00	5,545.00		29,488.00	21,819.00	13,520.00		....	....
1942 Expended	91,099.00	74,928 00			[illegible]				....	....
Budget	110,145.00	88,403 00			19,835.00				....	....

W.P.—Water Pollution
V D.—Venereal Disease
T.B —Tuberculosis

	Total Ch. Bur.	M.C.H. (A)	M.C.H. (B)	C.C. (A)	C.C. (B)
1957 Budget	276,821.00	78,586.00	31,086.00	77,316.00	89,833.00
1956 Expended	227,214.54	65,955.02	25,920.24	81,781.28	53,558.00
Budget	228,496.19	67,236.67	25,920.24	81,781.28	53,558.00
1955 Expended	199,293.88	55,906.58	26,128.79	68,110.51	49,148.00
Budget	212,158.83	64,445.25	26.128.79	72,436.79	49,148.00
1954 Expended	215.333.07	71,371.63	26,528.93	83,643.89	33,788.62
Budget	228,334.30	77,396.03	26,528.93	90,581.34	33,828.00
1953 Expended	230,772.03	68,996.24	19,625 55	44,740.42	67,409.82
Budget	283.862.49	87,381.27	49,626.46	79,444.76	67,410.00
1952 Expended	170,522.00	46.155.00	27,472.00	38,947.00	57,948.00
Budget	232,624.00	85,358.00	29,547.00	57,120.00	60,599.00
1951 Expended	140,504.00	47,145.00	24,820.00	22,683.00	45,856.00
Budget	197,534.00	80.805.00	26,898.00	37,990.00	51,841.00
1950 Expended	113,573.00	47,744.00	23,175 00	38,443.00	34,211.00
Budget	188,512.00	88,820.00	23,176 00	38,866.00	37,650.00
1949 Expended	151,903.00	53,468.00	20,255.00	40,888.00	37,292.00
Budget	185,046.00	65,172.00	27.108.00	41,964 00	50,802.00
1948 Expended	155,361.00	41,451.00	30,120.00	42,024.00	41,766.00
Budget	197,526.00	67,207.00	39,258.00	42,058.00	49,003.00
1947 Expended	109,483.00	32,110.00	27,320.00	29,956.00	20,097.00
Budget	140,345.00	33.595.00	49,658.00	30,000.00	27,092.00
1942 Expended	99,862.00	35,197.00	26,473.00	32,047.00	6,145.00
Budget	119,643.00	38,709.00	37,458.00	37,331.00	6,145.00

M.C.H. (A)—Maternal & Child Health funds that must be matched with state funds.

M.C.H. (B)—Maternal & Child Health funds that need not be matched with state funds, but can not be used until MCH 'A' funds are budgeted with required matching.

C.C. (A)—Crippled Children funds that must be matched with state funds.

C.C. (B)—Crippled Children funds that need not be matched with state funds, but can not be used until MCH'A' funds have been budgeted with required matching.

Footnote: Public Health Service funds are available on a variety of matching bases, depending on the type of funds; unused funds of most categories lapse each year.

Bacteriological Laboratory

Laboratory assistance is essential in determining many diseases. Special laboratory tests aid in confirming the physician's diagnosis. They also serve as a guide to the physician and health officer in determining treatment and precautions necessary to protect the public's health.

The laboratory extends such assistance by running tests on materials submitted by private physicians, hospitals, health officers, clinics and other state and federal agencies.

To other divisions of the State Board of Health it is primarily a service unit with most of its activities in the area of disease control and environmental sanitation.

Administration: Laboratory activity records and estimates of future demands and needs are essential to sound planning of budget needs and work volumes.

Environmental Sanitation: Bacterial analyses aid in determining the quality of water supplies for cities, private water supplies and those of government agencies.

Toxicity and bacteriological tests are run on samples of foods suspected of illness outbreaks.

Bacterial and mold count tests are run on some dairy product samples.

Disease Control: Copies of all reports of tests that prove positive are furnished the Division of Disease Control to permit follow-up and investigation when necessary.

Special services are provided by the laboratory when needed in confirming or establishing the nature of illness and disease outbreaks.

Certain laboratory records and reports are transmitted periodically to other local, state and federal government agencies.

Local Health Services: Laboratory staff members participate in planning extensions of laboratory services to local areas of the state.

Dental Health: Upon request, lactobacilli count determinations are made on saliva specimens submitted by dentists. With the lactobacilli count information, the dentist can advise the patient on ways to reduce the lactobacilli count, and thus aid in reducing the rate of dental decay.

A bacteriologist (left) uses a microscope to identify lactobacilli colonies while the bacteriologist on the right records a count after examining colonies developed on a culture media. The director of the Div. of Dental Health (center) is observing the procedure.

Child Health: Many laboratory services in the disease control area are essential to the child health program, particularly in diarrhea outbreaks in newborns and infants.

Rh blood factor determinations are run in this laboratory for prospective mothers. This service is available (through private physicians) for those areas of the state without this specialized laboratory service.

Public Health Nursing: Specimen collection and mailing equipment and containers are supplied, upon request, to local public health nursing service. This is for use in preparing and submitting specimens to the laboratory as directed by local physicians and health officers.

A bacteriologist is pictured performing one of the operations in the Kolmer Complement Fixation serological test for syphilis. Serological testing of blood samples for syphilis still comprises the major work for this laboratory.

to permit adequate review of private hospital and clinic laboratory facilities in the state.

Hospital Facilities: As required by state law, the State Board of Health reviews and approves laboratories for facilities and techniques for laboratory work. The staff of the laboratory assists the Hospital Facilities division in this review and approval responsibility.

Others: This laboratory exchanges information and maintains close cooperation with other state departments with related interests and responsibilities: the Livestock Sanitary Board, the Montana Dept. of Agriculture, etc.

Work Volume: In anticipation of a reduction in the volume of laboratory work, the staff was reduced in 1953 by one bacteriologist, one laboratory technician and one clerk-typist. In this report period the total number of specimens and examinations performed by the laboratory has declined. This was due to two significant factors.

The Kolmer CF test was previously run on all blood samples submitted for serologic testing for syphilis. This involved, time-consuming test is now run only on those reactor samples discovered in a quicker screening technique. As a result the number of tests necessary has been sharply reduced.

Another factor effecting the decline in samples and tests run in the laboratory is the establishment of serologic testing in all hospitals with 40 or more beds. New state hospital licensing regulations require that Montana hospitals of this size maintain such laboratory facilities. As a result, many blood specimens, previously submitted to the State Board of Health laboratory are now being handled by hospital laboratories.

New Developments: Initiation of the lactobacilli count program.

E. Coli typing service for use in studies of infant diarrhea outbreaks.

Planning and equipping of the new quarters in the State Laboratory Building, to be occupied late in 1956.

Planning for Montana's virus laboratory in the new State Laboratory Building.

Enterococci studies of water supplies.

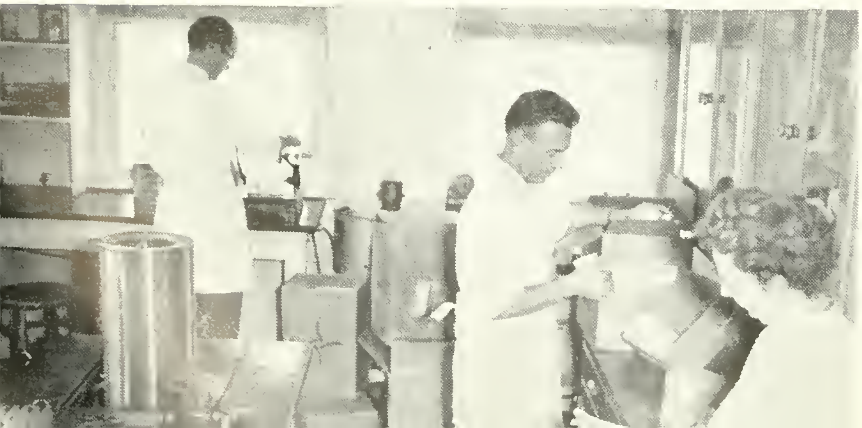
Problems and Needs: As in the past, the major problems of the laboratory arise from the continual staff turnover and the increasing difficulty of securing replacements — particularly of bacteriologists.

There is need for (1) more intensive on-the-job training for the laboratory's technical staff and (2) sufficient staff and funds

LABORATORY EXAMINATIONS

1954-56

Venereal Diseases	100,944
Enteric and related diseases	15,125
Tuberculosis	9,988
Diphtheria	627
Brucellosis	4,936
Tularemia	4,940
Food and Dairy Products	1,545
Water, Bacterial Analysis	15,344
Miscellaneous	682
TOTAL	154,131



Laboratory staff members participated with other State Board of Health staff members in packing polio vaccine for distribution throughout the state. When polio vaccine was first made available to Montana, the state's entire supply was distributed through the State Board of Health to insure equitable supplies to all counties.

Child Health Services

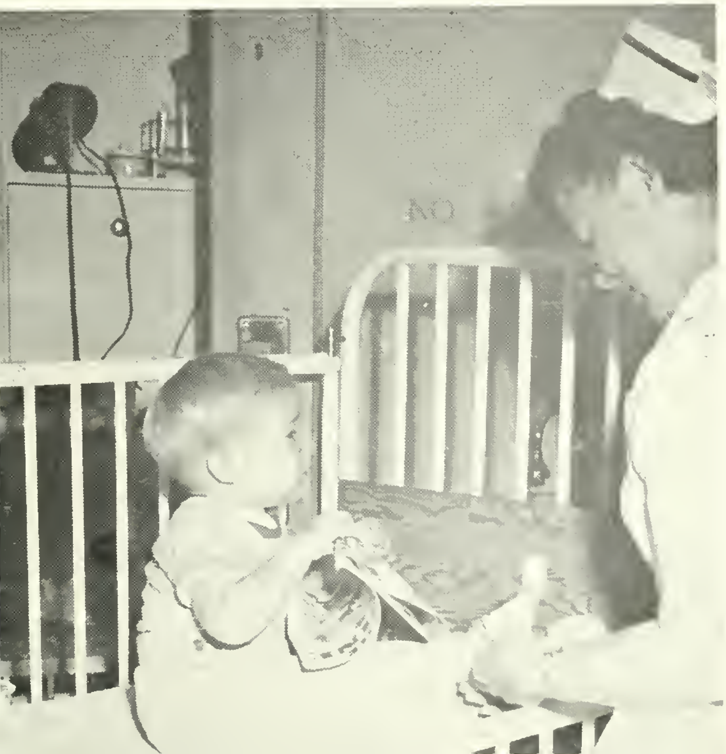
State Board of Health speech and hearing consultant training volunteer testers

HEARING PROGRAMS. Conservation of Hearing Programs are carried on in teams. Child Health Services initiated a hearing screening program to help local areas in 1956. Started in Missoula schools, the screening program required help from speech and hearing specialists, physicians, school principals and teachers, parents, public health nurses and volunteers. Four-hundred-fifty-four (454) seventh grade children were screened in Missoula schools by volunteers. Eighty-seven (87) of these were referred for further testing (19%) and 54 (12%) of these were found to have some hearing loss.

RHEUMATIC FEVER AND HEART FOLLOW-UP PROGRAM. Children who are crippled by rheumatic fever or whose hearts are damaged by rheumatic fever are cared for by the same Team approach as other crippled children. Services provided are:

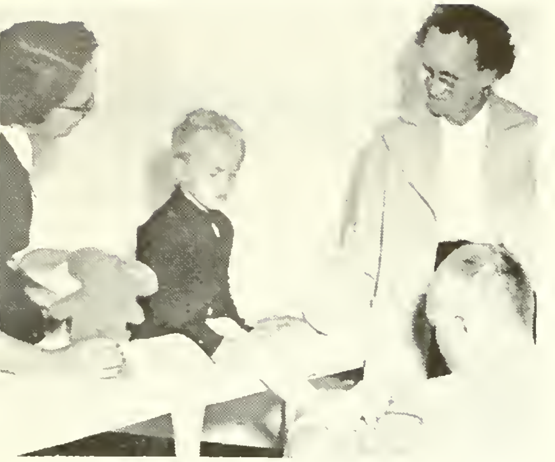
Evaluation at Rheumatic Fever Center, Great Falls. (Examination, special laboratory tests, electrocardiagrams, x-rays, etc.) Two hundred-thirty-three (233) children were seen in 1954-56.

Treatment and convalescence at Shodair Hospital. 49 hospitalized in 1954-56.



Penicillin daily to prevent recurrence of rheumatic fever provided for 66 children in 1954-56.

Team approach to



Team consists of orthopedic surgeon, pediatrician, public health nurses, welfare workers and workers in rehabilitation.

CRIPPLED CHILDREN'S CLINICS. Forty-six (46) Clinics were held in 1954-56 at which 2812 children were examined. Started as orthopedic clinics in 1936, the Clinics now see a wide variety of handicapping conditions. These include congenital heart disease, neurological disorders, tumors, burn scars, defects of speech and hearing, as well as the many deformities of bone, joint and muscle. Diagnostic services are available without regard to financial status. Treatment services are provided only for children whose families need help.

Evaluation at Clinic and direct referrals from local physicians and agencies resulted in:

Hospitalization was provided for 506 children. This includes electroencephalograms, pneumoencephalograms and other laboratory tests, casts, and rheumatic fever treatment, as well as surgery.

Braces for 135 children. Surgery for 230 children and hospitalization for 506 children.

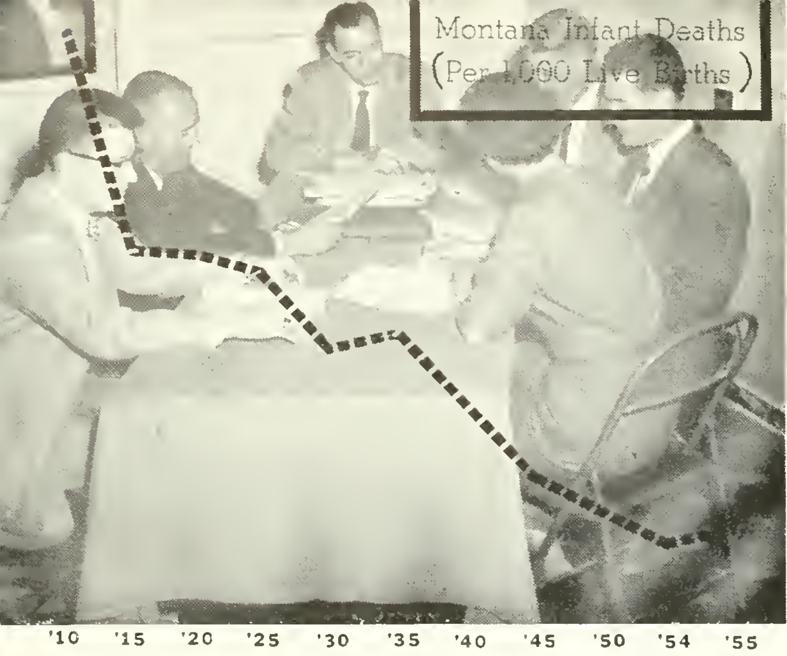
Handicapping Conditions of Children

Cleft Palate Team discusses long range plan for child just examined. Team members are: surgeon, orthodontist, prosthedontist, pediatrician, speech and hearing therapist and public health nurse.

CLEFT PALATE TEAMS. The Cleft Palate Teams were started late in 1954 in Great Falls, Helena and Billings. In the last biennium, 90 children were evaluated in these three Clinics. There is an estimated backlog of 400 children with cleft lip and cleft palate; approximately 27 are born every year. With recent improvement in available equipment and services, more children will be evaluated and treated in the next five years. Diagnostic services include cephalometric x-rays, facial masks, dental casts, intra-oral photographs and x-rays. Treatment services include surgery, orthodontia, prosthedontia and speech therapy.

CEREBRAL PALSY CENTER. The Cerebral Palsy Center in Billings is a cooperative effort of the State Board of Health, the Eastern Montana College of Education, Local School Districts and the Montana Society for Crippled Children. Started in 1946, it was limited to children with cerebral palsy who lived in Yellowstone County and a few surrounding counties. Now it serves all counties in the state and a variety of other handicapping conditions are being accepted. Two-hundred-nineteen (219) children were seen in out-patient clinics in the period of 1954-56. There is an average of 30 children for in-patient care and education.

Newest addition to the Center's Team is a public health nurse. Other Team members include orthopedic surgeons, pediatricians, speech therapists, physical therapists, occupational therapists and teachers. These team members with the exception of the teachers are employed by the State Board of Health and the teachers are employed by the Billings school district and the Crippled Children's Society. The Mental Hygiene Clinic, Welfare Workers and rehabilitation counsellors are valuable sources of help for the Team.



Maternal and Chil

Maternal and Child Welfare Committee of the Montana Medical Association acts in an advisory capacity to the Division of Child Health Services, discusses and recommends procedures for care of infants and mothers, and studies maternal and newborn mortality.

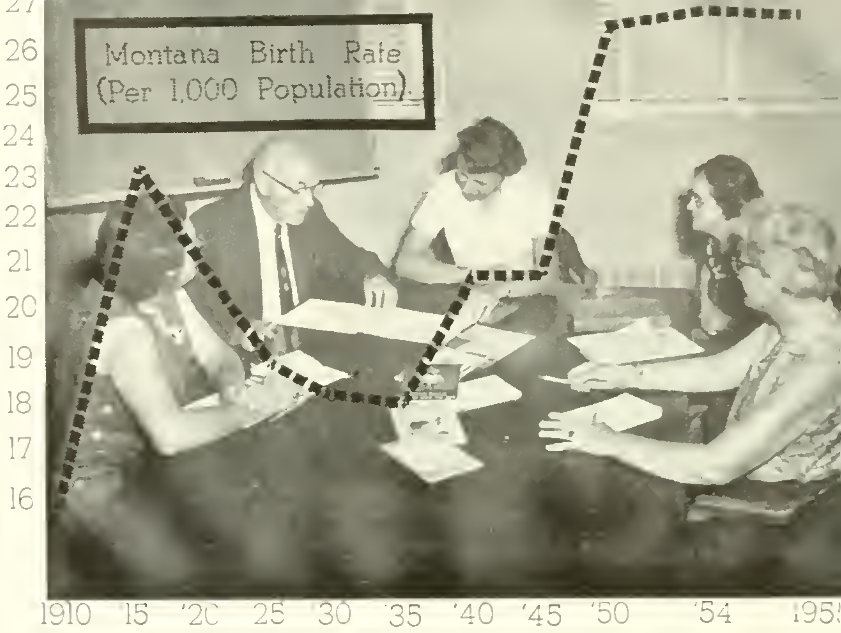
20 high school classes were held in 1954-56 by local Public Health Nurses, in cooperation with local schools. The topic is "Education for Parenthood" in the Home Economics course in Family Living.

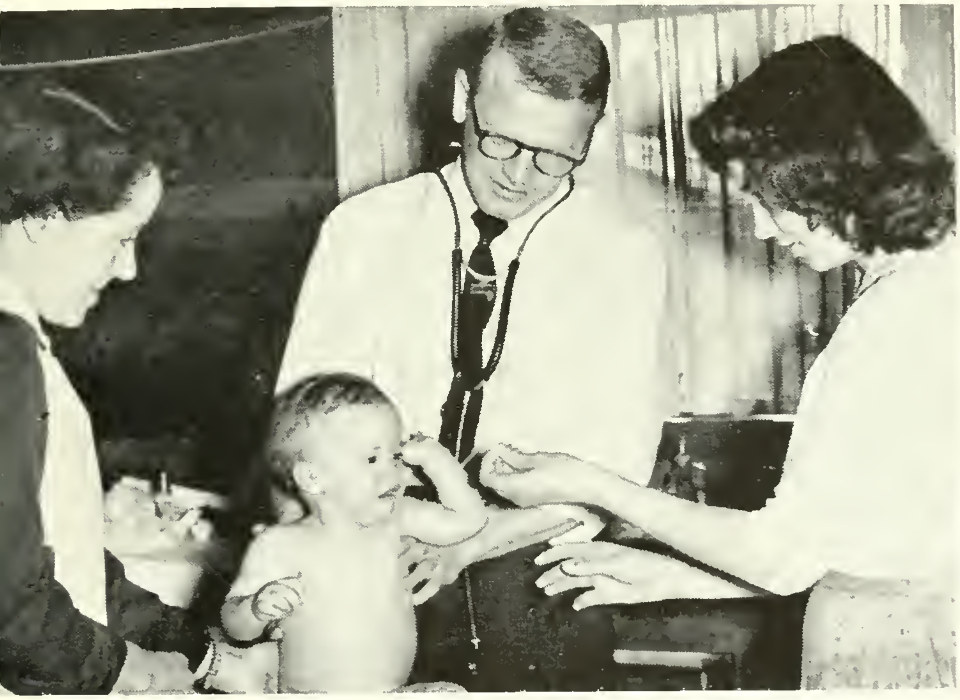
Preschool children should have supervision in growth and development to keep them happy and well and growing as they should, as well as immunizations and treatment for illness. Parent education is given through such media as a radio transcription series on growth and development.

Health of the school age child is stressed through educational programs with parents, teachers, physicians, public health personnel. On this subject, meetings sponsored in cooperation with the Department of Public Instruction, Montana Medical Association were held in eleven (11) areas in 1954-56, in Montana.

Health Activities

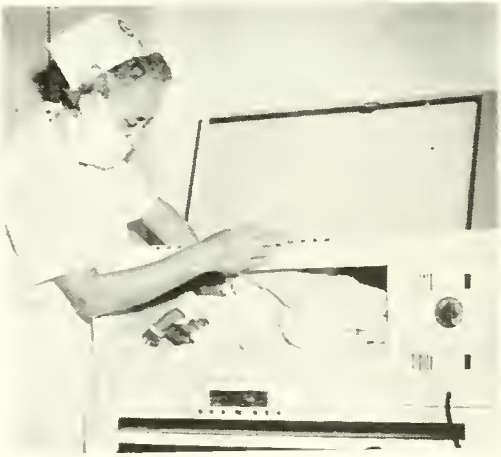
Graph showing increase birth rate in Montana. State Board of Health personnel from the Division of Child Health Services, Dental Health, Public Health Nursing, Disease Control and Hospital Facilities work in the programs pictured on this page. In addition, facilities of the State Laboratory and Vital Statistics are utilized.





Well-child conferences are sponsored in 19 areas. Physicians and public health nurses given attention to mental, physical and emotional problems of 9,311 children from birth to school age at these clinics. 2,845 immunizations were given.

Expectant Mothers' Discussion Groups are held in 8 areas by local public health nurses. 175 mothers attended these classes in 1954-56. (State Board of Health Nursing Consultant helps local public health nurses prepare for classes. (below)



35 incubators are on permanent loan to hospitals in Montana. Four incubators are available for emergency calls. Hospitals are encouraged to learn how to use and buy adequate equipment for care of premature and newborn infants. Equipment such as oxygen analyzers is demonstrated and loaned. Consultation is available to physicians and hospitals on techniques and standards of care.

Dental Health

"A stitch in time saves nine" best characterizes the philosophy of the Division of Dental Health. To maintain dental health—by preventing disease and abnormalities—is cheaper, more effective, and certainly more desirable to the individual than permitting conditions to develop that require treatment.

This primary emphasis on prevention functions most effectively through education: for the parent, the child, the teacher, the dentist and others with a role in dental health.

Comprehensive dental health programs in this biennium have been directed at:

1. Prevention and control of dental decay.
2. Reduction of the incidence of diseases of the gums.
3. Early detection and treatment of malignancies of the mouth.
4. Discovery and early treatment of malpositioned teeth to avoid physical and emotional handicaps.

Dental health education exhibit at Montana State 4-H Club Congress, Bozeman, 1955.

5. Specialized post-graduate training for practicing dentists of Montana.

Studies have and are now being conducted by this division to:

—determine dental needs in the state and in specific communities.
—develop information for determining the value of local dental programs.
—to aid in evaluating dental programs of the past and present.
—as an educational tool for parents and children.
—to encourage regular, early and continuing dental care.

All dental health programs and plans are developed in close cooperation with other divisions of the State Board of Health, as well as the Montana State Dental Association.

A dental education-caries control program was recently initiated in conjunction with the Montana State Dental Association Council on Dental Health. Dentists may submit to this division saliva specimens of patients exhibiting rampant dental caries. The bacteriological laboratory determines the specimens' lactobacilli count. With this information from the laboratory, the dentist can assist the patient in adjusting his diet to reduce the lactobacilli in the mouth and, as a result, reduce the incidence of dental caries. More and more dentists are availing themselves of this service for their patients.

In cooperation with the Division of Child Health Services, a study is being made to explore the possibilities of a program to aid the child with severely malpositioned teeth. If such a program can be developed, it is intended it should supplement the State Board of Health's present Cleft Lip-Cleft Palate Program.

Continuing efforts are being made to develop comprehensive dental education, and preventive and control programs for every Montana community.

FLUORIDATION

To determine local dental health needs, dental surveys have been conducted in Polson, Miles City and Roundup. Laboratory studies show that Polson's public water supply contains little or no fluorine. Miles City

A grade-school girl gets her regular pre-school dental examination. This division's school dental program is conducted in cooperation with local dental societies and local school personnel.

This staff (left) conducted a dental survey of over 450 Miles City children in the spring of 1955 to aid in determining the community's dental health and needs. A member of the local dental society (below) examines a child while a volunteer dental assistant records the dentist's findings.

and Roundup use water that contains approximately 0.5 parts fluorine per million parts of water.

It has been found that Miles City six-year-olds have 35.4% fewer decayed, missing and filled **deciduous (baby)** teeth than Polson's six-year-olds. In Miles City, ten-year-old children were found to have 54.9% fewer decayed, missing and filled **permanent** teeth than the 10-year-olds in Polson. The better teeth in Miles City is attributed to the fluorine in the community water supply.

Since these studies were completed, Miles City, on July 13, 1955, began adding fluorides to its water supply to bring the content up to the optimal amount (1.0 per million parts water) to obtain the maximum protection against dental decay, available through fluorine in the water supply.

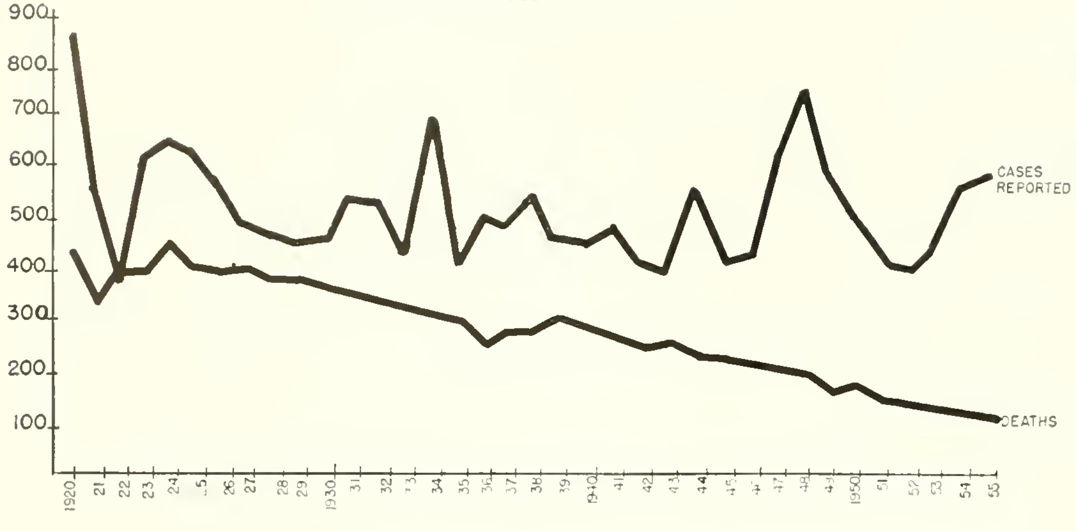
Roundup's community water supply had 0.5 ppm fluorine in its water supply. For four years now, Roundup has been supplementing the fluorine content of its water, to bring it up to the optimal amount, 1 ppm. Studies show that Roundup children are—after only four years—reaping the benefits of drinking water with a controlled fluoride content. A dental survey in February 1956 revealed that six-year-old children in Roundup had 20% fewer decayed, missing or filled deciduous teeth than the same age children in Miles City. The study also showed the Roundup six-year-olds had 55% fewer decayed, missing and filled deciduous teeth than six-year-olds in Polson, a community without fluoride in its water. Details of this study are on file in the Division of Dental Health office.

Below are the tabulated findings of 1955 dental surveys in Miles City and Polson. Miles City has a yearly average of 0.5 ppm. fluorine in its community water supply; Polson's water contains no fluorides. Miles City did not start adding fluorides (to bring them up to the optimum level) until after this dental survey was made. These findings are based on clinical examinations made by local dentists. (DMF includes permanent teeth decayed, missing—(lost subsequent to eruption)—or filled; def includes deciduous teeth decayed, extracted — (lost prematurely) — or filled.

Age	No. of Children Examined		DMF Teeth (Permanent) Per Child		def Teeth (Deciduous) Per Child	
	Polson	Miles City	Polson	Miles City	Polson	Miles City
6	52	31	1.08	0.90	7.38	4.77
7	81	78	1.94	1.42	7.81	5.47
8	59	66	2.00	1.83	5.79	4.54
9	41	79	3.25	2.18	3.43	3.54
10	54	62	4.50	2.03	2.48	2.29

These Miles City school children (left) are pictured drinking fluoridated water at their school water fountain. Children in this community will benefit greatly from the controlled fluordation of the water supply, in the public health program to reduce dental decay.

Disease Control



NUMBER OF CASES AND DEATHS OF TUBERCULOSIS REPORTED
Montana, 1920—1955

Disease control is basic to Montana's public health. Work in this field ranges from childhood diseases, like measles and chicken pox, to diseases like cancer, syphilis and occupational diseases and industrial hygiene.

There are almost as many disease patterns as there are diseases to be reported. Since 1920 there has been a steady decline in tuberculosis in Montana. In the same 36-year period there have been sharp increases and declines in reported syphilis cases in the state. Measles and some other childhood diseases tend to repeat cycles of ups-and-downs. Cancer and heart deaths continue to increase, following a pattern established over 20 years ago.

Chest X-Ray Survey. In August of 1955 the intensified Chest X-Ray Survey was completed in Montana's 56 counties. It x-rayed approximately 343,000 Montanans or 75% of the population eligible to be x-rayed. Previous chest x-ray surveys in Montana had x-rayed only 36%.

Montana's survey achieved the most extensive coverage reported in any state-wide chest screening. While achieving this extensive coverage the cost per person x-rayed was slashed over 34%—from 94c per person to 62c per person.

Of those x-rayed 6,063 were referred to their physicians for diagnosis of suspect pathological conditions. Final reports from family physicians are on file on about 70% of those referrals.

Failure in follow-up of each is in a large part due to inadequate local public health staffs essential to complete follow-up on each suspect in every county.

Referrals, on which final reports are now on file, reveal: 3,587 chest pathological conditions discovered in the survey; about 24%, 849 of these were not previously known to person x-rayed; of these pathological conditions, 675 have been diagnosed as tuberculosis, 126 neoplasms (growths, like tumors); 1,645 abnormal heart conditions and over 900 other significant chest abnormalities.

Tuberculosis: The tuberculosis death rate is now the lowest in the state's history. The 55 deaths recorded in 1955 gave Montana a tuberculosis death rate of 7.9 (per 100,000 population).

Cases of tuberculosis are declining too, but this decline has not been as sharp. The 321 active or probably active tuberculosis cases reported in 1955 gave Montana a tuberculosis case rate of 50.7 (per 100,000 population).

In the calendar year 1955 the U. S. Public Health Service reports revealed Montana had the highest tuberculosis case and death rates in the entire Pacific Northwest. Montana's case and death rates in 1955 were also higher than any of the bordering states.

A significant factor is the increasing ratio of reported cases to deaths. At one time it was 1 to 1. Today Montana has about 8½ cases of tuberculosis reported for every tuberculosis death.

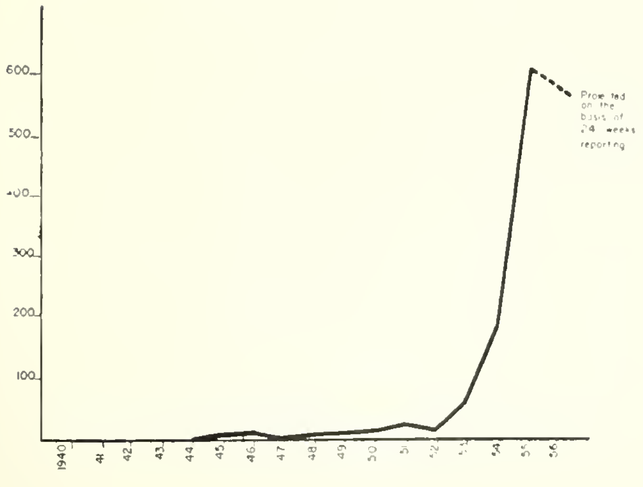
The chest x-ray survey pin-pointed the tuberculosis problem in Montana. It is most serious among the Indian population. Tuberculosis is about 13 times as prevalent among Indians as in the non-Indian population. On an average, tuberculosis is twice as high in the white population in areas contiguous to Indian populations as the white population in other areas of the state.

Detection and discovery of new cases is wasted unless money and staff are made available to follow-up these discoveries. These cases must not be permitted to infect other persons. They must be brought under proper medical care. This is necessary to prevent other tuberculosis deaths.

Cancer and Heart: These two disease conditions continue to move up Montana's ladder of causes of death. In 1910, cancer was the 8th ranking cause of death in Montana; heart disease was 4th. Today heart disease is first and cancer second.

Professional lectures on cancer and heart disease diagnosis and treatment are sponsored by the State Board of Health and the Montana Division of the American Cancer Society, as part of a program aimed at improving medical services. Health education efforts in these areas—in close cooperation with private health agencies—are directed at early detection and prevention of heart and cancer conditions. Future plans call for expanding and improving heart diagnostic services at the Rheumatic Heart Center in Great Falls. It is expected that the cancer register will permit epidemiological studies of cancer in Montana, possibly in the 1956-58 biennium.

REPORTED CASES OF INFECTIOUS HEPATITIS Montana, 1940-1955



Infectious Hepatitis: Intensive studies have been made of infectious hepatitis outbreaks in Sanders and Dawson counties. These outbreaks reached epidemic proportions. U. S. Public Health officials worked with State health officials in these investigations. USPHS reports indicated that Montana, in early 1956, had more infectious hepatitis than any other area in the nation.

Streptococcal Infections: The number of streptococcal infections (including scarlet fever) in 1955 was the second lowest in history, with 398 reported cases. Only 1936, with 344, had fewer cases. With the newer knowledge of the relationship between streptococcus infections and rheumatic fever and nephritis, the importance of control is becoming more significant in disease control activities.

Epidemic Meningitis: Epidemic meningitis occurred in epidemic form in Browning. Sulpha drugs were distributed on a community-wide basis to control outbreaks in Browning, Warm Springs and Lavina, in 1955 and 1956.

Poliomyelitis: There is hope that 1956 marks the beginning of the end of poliomyelitis as a significant communicable disease in Montana. About 13,000 Montana school children were immunized in the field trial of the new poliomyelitis vaccine in the spring of 1954. Another 165,000 doses were given to 100,000 **children under 15 years and expectant mothers** from September of 1955 through June of 1956. This constitutes 52% of the eligible persons (under 15 years and expectant mothers) having received at least minimum immunization against poliomyelitis by the end of the fiscal year.

Approximately 60% of the 150 cases of poliomyelitis reported in 1955 were paralytic. It was the ninth year that Montana had over 100 cases but was a decline of 30 cases (17%) from the previous year and 4 cases (3%) below the 5-year average for poliomyelitis in Montana, 1950-54.

Rocky Mountain Spotted Fever: Since the 15 cases reported in 1950, there has been a steady decline. The single case reported in 1955 reflects the progress from the 125 cases reported in Montana in 1936.

Syphilis: This disease continues to be a significant public health problem. Following World War II there was a steady decline in the number of cases reported: 633 cases reported in 1948 to a low of 31 cases in 1954. From records of cases treated and laboratory reports, it is estimated the total number of syphilis cases in 1954 was 291, as contrasted to the 31 cases reported. But 1955 saw the number of cases reported jump six-fold to 179. Part of this sharp increase, however, is related to efforts to improve reporting of syphilis by health officers and private physicians. The increase in the reported cases of early syphilis in the first part of 1956 indicates there may be an actual increase in syphilis in Montana.

Gonorrhea: As with syphilis, there was a post-war decline in gonorrhea. By 1951 the number of cases reported fell to 144. But in the four years following, there has been a steady increase to 223 in 1955—the largest number since 1948. The disease continues of public health significance in the state.

Gamma Globulin: This blood fraction, supplied by the Red Cross and the National Foundation for Infantile Paralysis, was distributed by the State Board of Health to Montana physicians according to established criteria.

For the prevention of polio, the State Board of Health distributed 22,850 cubic centimeters of GG from NFIP in 1954; in 1955, 10,820 cubic centimeters were distributed. This distribution was discontinued January, 1956.

Distribution of limited supply of Red Cross gamma globulin continues for use in the modification and prevention of measles, infectious hepatitis and for the treatment of agammaglobulinemia. For measles, infectious hepatitis and agamma-globulinemia, 8,912 cubic centimeters of gamma globulin were distributed in 1954 and 9,386 cubic centimeters in 1955. The limited supply of gamma globulin available from the Red Cross is allocated to Montana on a basis of the state's reporting of these conditions in previous years.

Industrial Hygiene: Activities in industrial hygiene are intended to promote and maintain the health, productivity and well-being of Montana workers. This requires an understanding of the delicate balance between the worker and the stresses imposed by his job or industrial environment. This program was reestablished in 1955 with the employment of an engineer with special training in industral hygiene. Medical supervision and consultation for this program is provided through the director of the Div. of Disease Control. The industrial hygiene engineer responsible for this work attempts to anticipate potential hazards and to suggest alternate processes and changes in equipment to avoid health hazards.

Work has continued in developing a complete file of Montana industries, their size, their products, relationships with other industries and potential industrial hygiene problems. Some industries in the state are cooperating in studies of absentees by providing monthly reports of absentees and brief descriptions of the cause of absence from work.

While some work has been devoted to bringing the industrial hygiene files on silicosis up to date and in order, there is need for more work in this area. Staff and money are limiting factors.

Since August of 1955, about 100 Montana industries have been studied for factors of industrial hygiene significance. Copies of the reports, findings and recommendations, are sent to the management of each industrial operation studied. Most of the studies have involved small operations, employing from two to less than 300 workers. Printing, paint manufacturers, chemical manufacturers, wood-working, foundry work, petroleum refineries, metal fabrications, and cement producers have been the principal type of operations studied. To date, studies have been made of operations involving about 2,000 workers. There are approximately 32,000 industrial workers in the state.

Less than a dozen Montana hospitals and clinics have received and are using radioactive isotopes provided by the Atomic Energy Commission. Records are maintained on the distribution and use of these materials in Montana. Future plans call for studies of their use to insure that proper handling and waste-disposal procedures are being followed, to guard against air and water pollution by the radioactive materials as well as to insure the safety of those working with the materials. No radioactive isotopes are being used in Montana industry.

The most significant health need in industrial hygiene is in mining, milling and smelting operations in this state. More information is needed on the operations of all these industries. Technical and medical programs are needed, especially in those operations too small to provide their own industrial hygiene services.

Occupational disease reporting continues to be unsatisfactory. Working with management, hospitals, physicians, the Industrial Accident Board and the workers themselves, it is hoped this reporting can be substantially improved.

Chemical Laboratory: All chemical laboratory work has been coordinated and integrated in the laboratory of the Div. of Disease Control in the laboratory building. One chemist concentrates on industrial hygiene activities; the other chemist places the emphasis on work in food, drug and water pollution study activities. The staff of the laboratory has cooperated with the American Conference of Governmental Industrial Hygienists in the standardizing techniques for analyzing for antimony, arsenic, lead, and manganese and sulphur dioxide.

The chemical laboratory makes determinations on samples collected by the industrial hygiene engineer.

Toxicological Services: Law enforcement officers, coroners, physicians and hospitals can secure toxilogical service through this division and its chemical laboratory. This service is helpful in determining causes of death, poison identifications and in answering other toxicological questions associated with disease.

Alcohol Determinations: Alcohol determinations are made on blood and urine samples submitted by the State Highway Patrol. In connection with the alcohol determinations, the chemists are often called upon to give testimony in cases involving charges of driving under the influence of alcohol.

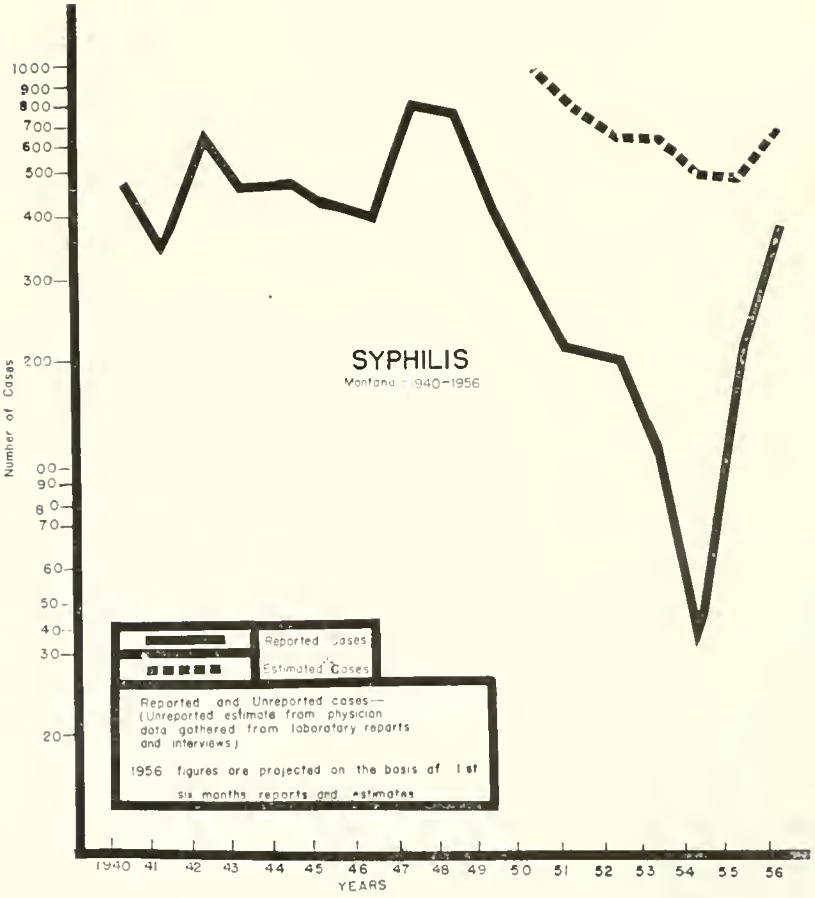
Food, Drug & Water Analysis: Activities in this area include: chemical analysis of water, food and drug samples from the Division of Environmental Sanitation and the State Department of Agriculture.

Analyses are made on fat and moisture in ice cream, cheese and butter samples from the Dairy Division of the State Agriculture Department.

Phenol determinations were run in this laboratory on water samples collected in the Division of Environmental Sanitation Study of Pollution in the Yellowstone River.

Tests were also conducted in this laboratory for added moisture, filler, sulphites, preservatives, and coloring in ground beef, sausage, weiners, and franks.

Regulations and Reporting: Disease rules and regulations for communicable and other diseases have been revised and modified in line with recent medical findings to achieve better disease control. Disease reporting forms have also been modified to further improve case reporting by local health officers and physicians. While there is still a need for better case reporting in Montana, it is improving and giving a more reliable and realistic picture of disease conditions.



Environmental Sanitation

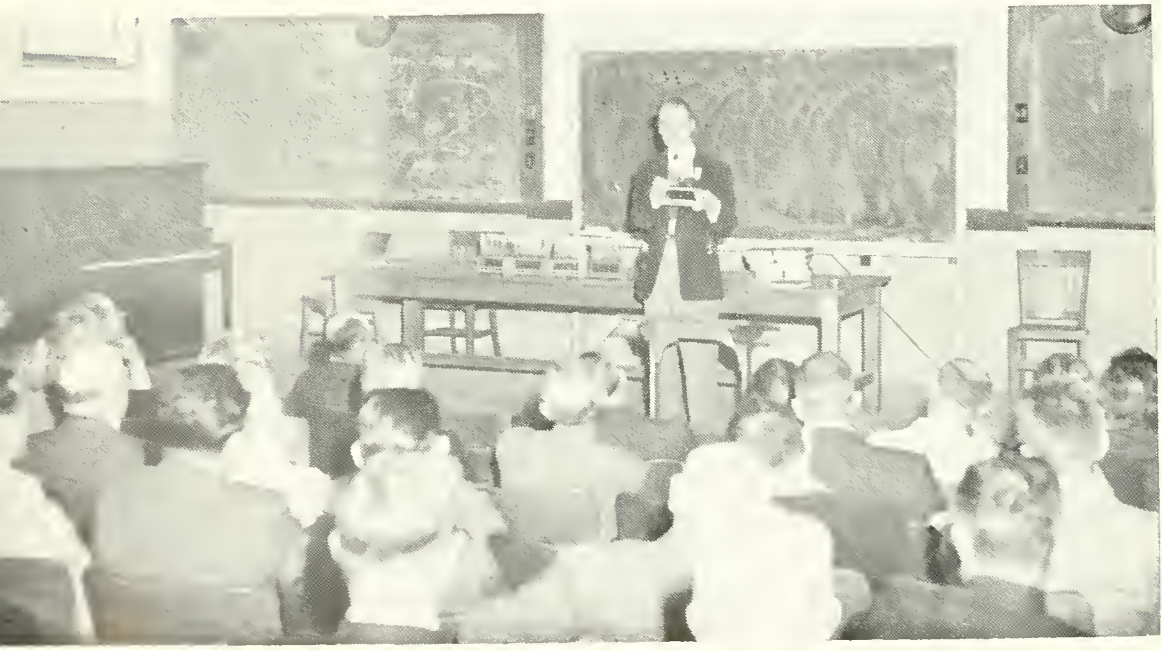
Responsibilities of this Division include the entire field of sanitation in the environment in which Montanans live and where the State Board of Health has jurisdiction. These responsibilities include sanitation features of community water supplies, sewage disposal systems, public swimming pools and stream pollution control; approval of the plans for schools, covering sanitary aspects of new construction and remodeling; licensing of septic tank cleaners, food manufacturing plants, meat markets, locker plants, motels, food handling establishments including taverns; regulation of the sanitary aspects of hotels, and administration of commercial insecticides, mattress and overstuffed furniture and food and drug legislation.

Staff and budget limitations restrict this division's ability to meet all of these responsibilities adequately and adequate programs are carried out only in water supply and school plan review.

Sanitarians: The State Board of Health offers consultation and guidance to local sanitarians. The one sanitarian on the State Board of Health staff works with local sanitarians in evaluating their activities and planning for improved programs.

Of Montana's 56 counties, there are 38 (68%) without sanitarians. The work of the 16 local sanitarians is limited to 18 counties. These local sanitarians are agents of local public health officers who are legally responsible for most of the sanitation work in their communities. They inspect public eating establishments, tourist courts, trailer courts, meat markets, motels, hotels and taverns, and recommend to the State Board of Health issuance of proper licenses to qualified establishments. If the sanitarian and his health officer judge an establishment to be insanitary and a danger to public health, they may recommend that the license not be issued until insanitary conditions are corrected.

Local sanitarians also assist home-owners in planning effective private sewage disposal systems and private water supplies. Problems concerning operation of private water



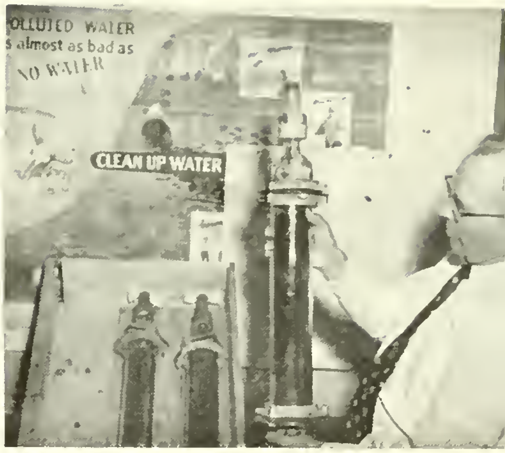
Dr. W. G. Walters conducts a class in bacteriology at the 1955 School for Water & Sewage Plant operators. Cooperatively sponsored by the State Board of Health and Montana State College, the annual school is designed to improve water and sewage work done in communities throughout Montana.

and sewage systems are directed to the local sanitarian if one is available.

There should be at least three sanitarians on the state level. The single sanitarian now employed handles the administrative work involved in licensing over 7,000 establishments; handles food and drug correspondence; provides information on commercial insecticides; prepares correspondence involving the state mattress act; studies the need for and assists in developing new regulations to meet changing conditions in his field (for example artificial sweetening used in beverages, mineral and vitamin fortification of milk). The sanitarian staff at the state level should be such as to permit a state sanitarian to work with each local sanitarian at least one week each year in addition to office duties and direct aid or investigation in the 38 counties lacking sanitarians. To be unable to do this because of budget limitations means that some things cannot be done. As a result, the environmental sanitation in these areas is less than desirable. In a financial vein, insanitary conditions are a threat to the state's growing tourist industry as well as a threat to the health of Montana's citizens.

Stream Pollution. To do an effective job in stream pollution control and abatement, it is essential that additional technical staff be added. A great deal of basic information has been developed on stream pollution—as it relates to public health in Montana. But the 1955 legislature, in creating the Montana Stream Pollution Council, included industry, agriculture, fishing, recreation and other legitimate water uses as factors to be considered in pollution control and abatement. This requires that more extensive studies be made throughout the state. To conduct such studies, assist the Council, work closely with industry and local communities of the state, at least two sanitary engineers, a chemist and a biologist should be added to the staff.

Water and Sewage: Public health engineers made and prepared reports on 322 inspections of public water plants in this two-year period; 177 sewage systems were inspected and the reports of these inspections included recommendations for improving operations and more adequately meeting future needs of the communities.



A public health engineer examines special carbon filters loaned Montana by the U. S. Public Health Service for a pollution study of the Yellowstone River. The 1955 study was conducted following complaints, from Billings to Miles City, of the bad taste and odor of drinking water taken from the river.

Public water supply plans approved included new systems at Cherry Creek in Valley County, Yellowtail Dam at Lockwood near Billings, and at Brockton, Worden, Round Butte and Glasgow Air Force Base. New intake and supply lines were constructed at Browning. A new water intake was installed at Red Lodge. New wells have been constructed at Missoula, Froid, Richey, Superior, and Livingston. Helena has built a new chlorinator house for its city water system. Improvements have been made in the filtration plants at Great Falls, Billings and Hardin. Laurel constructed a new water-filtration plant.

Economical and efficient raw sewage stabilization ponds are proving the answer to many Montana communities' sewage disposal problems. Staff engineers have reviewed and approved plans for new sewage stabilization ponds constructed at Baker, St. Ignatius, Geraldine, Brady, Glasgow Air Force Base, Opheim, Hingham, Big Sandy, Choteau, Charlo, Chester, Denton, East Helena, Worden, Yellowtail Dam, Cherry Creek (adjacent to Glasgow) and North Havre. There are now 16 sewage stabilization ponds in operation in Montana.

A sanitarian and a sanitarian's aide inspect the operation of a bakery on a field trip made as part of the instruction at the annual Sanitarians Training Conference in Helena in 1955.

As required by law, plans for additions, replacements and new construction for 79 public water supplies and 105 sewage disposal systems were reviewed and approved during this period.

School Buildings: A healthy and safe environment is the objective of every school building. Montana law requires that this division review all school building plans prior to the start of construction or remodeling. In this biennium 220 sets of school building plans were reviewed and studied to see that they meet minimum standards for light, heating, plumbing and ventilation.

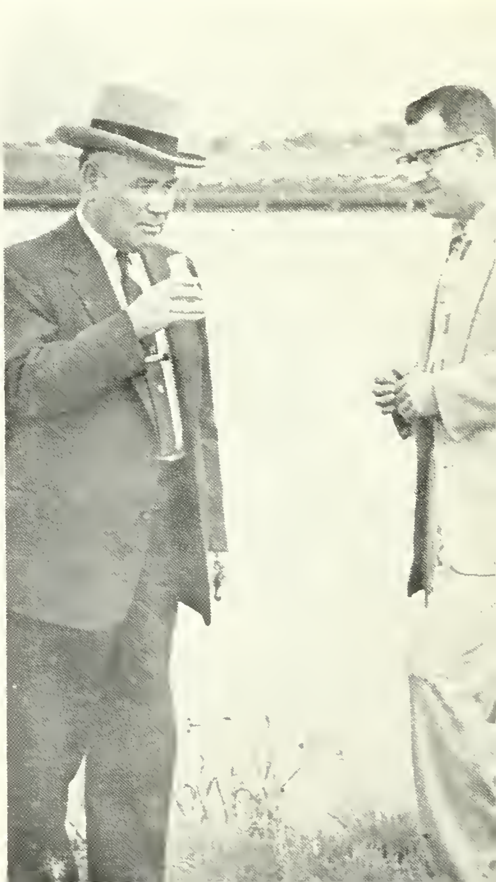
Testing Program: Municipalities pay a fee to cover the cost of water supply testing and for inspections and plan review. Bacteriological water testing is done in the bacteriological laboratory. The chemical laboratory tests the water of all new public water supplies when the supply is developed, and the water from the older public supplies is tested at least once each five years. The chemical laboratory is called upon periodically to assist in river pollution studies and to determine certain particular chemicals that might be in the water which could be detrimental. Routinely, the Yellowstone River is checked for phenol content. This river is also checked for cyanide and arsenic when the conditions indicate that these might be important substances in the stream.

Ground meat samples are tested in the chemical laboratory. The samples are collected by the local sanitarians as a regular purchase paid for by the state. If the sample is adulterated, either by working in a lot of fat or if a filler, such as starch or cereal, has been added or if there are chemical preservatives, the sample is not passed and a warning is issued to the meat market. If the meat market does not heed the warning, prosecution could ensue. There have been no cases prosecuted during the biennium.

Water Needs Growing: Obtaining adequate supplies of satisfactory water is the most significant threat to Montana's environmental sanitation. The majority of the communities are disinfecting their water when the source is contaminated.

All surface water supplies in Montana are contaminated, some to a greater degree than others.

In a few communities there is still strong opposition to the use of chlorine to disinfect



A city-county health department sanitarian, with a public health engineer, sniffs a sample bottle of fluid from the East Helena sewage stabilization pond and finds there is no odor. Sewage stabilization ponds are proving effective and inexpensive answers to many Montana communities' sewage disposal problems.

the water supply. As a result of this feeling, in these few areas chlorination of the water may be irregular. Oftentimes the chlorine is not properly applied. In a few instances those responsible notify the water users to disinfect the water by boiling and continue to serve contaminated water. All public water supplies are sampled routinely. The results of these bacteriological studies aid officials in maintaining a safe water supply.

There are six Montana communities, with a total population of less than 1400, taking contaminated untreated surface water into their public water systems.

Montanans should not harbor a false feeling of security about how frequently their public eating establishments are inspected, how thorough the pollution of streams is policed, how well-controlled septic tank cleaning operators are regulated, and how effectively other environmental sanitation responsibilities are met.

It is one thing to assign a responsibility by law. It is still another to provide the budget and staff to meet these responsibilities.

Related Activities: This division works closely with the Montana Pollution Control Council and the State Board of Plumbing Examiners, with the director serving as secretary of both. Staff of this division serve on the Joint Staff Committee of the Department of Public Instruction and the State Board of Health. A guide on school environment is now being developed for the Joint Staff Committee. It will be a guide or recommendations on factors related to the health and safety of the child in the school environment.

A member of this division serves as secretary of the Sanitarians' Association of Montana. Another serves as secretary of the Montana Section of the American Water Works Association.

Other related activities of this division include: Conference of State Sanitary Engineers; the Missouri Basin Health Council, engineering section; the Pacific Northwest Water Pollution Council; and the Columbia Basin Inter-agency Subcommittee on Stream Pollution.

INSPECTIONS
July 1, 1954 to June 30, 1956

	Number	Percent of Total
Inspection of Public Water Supplies	351	55.1
Inspection of Private Water Supplies	12	1.9
Inspection of Sewage Disposal System	225	35.4
Inspection of Swimming Pools	32	5.1
Miscellaneous Inspections	16	2.5
TOTALS	636	100.0

WATER SAMPLES TESTED
July 1, 1954 to June 30, 1956

	Bacteriological	Chemical	Percent of Total
Samples from Public Supplies	11,425	617	73.6
Samples from Private Water Supplies	2,826	253	18.8
Samples from School Water Supplies	303	13	1.9
Samples from Tourist Court Water Sup.	66	...	.4
Samples from U.S. Government	425	...	2.7
Samples from Miscellaneous Sources	197	218	2.6
TOTALS	15,242	1,101	100.0

Quantity and quality of public drinking water is proving a problem in several areas of the State. To insure the quality of its water Helena built and placed this new chlorinating plant in operation at its settling basin in the summer of 1956.

Two summer schools of alcohol studies (left) were conducted by the State Board of Health in 1956 at Montana State University and at the Eastern Montana College of Education. These two schools were a major responsibility of the Div. of Health Education with assistance from other state and out-of-state agencies.

Health Education

Public health being chiefly a program of prevention and education, a large part of the State Board of Health's activities are educational in nature.

The Division of Health Education reinforces and coordinates the educational aspects of the Board's many health programs. This is accomplished by planning with and extending assistance to other divisions, helping local public health personnel, and working directly with local school and community groups, other agencies, voluntary and professional health associations.

The object of this adult health education program is to motivate and assist people in solving community health problems, and is not limited to giving information.

Program Planning: Better, more extensive and efficient services are the objectives of joint planning between this division and other divisions, and program directors of the State Board of Health. In addition to major programs, detailed elsewhere in this report, this division has and is participating in the following programs: Indian Health; Home Safety Education; Civil Defense; Sanitation; Mental Health; and Staff Orientation. Assistance has also been given to the Montana Health Planning Council.

Dental: Activities in an over-all dental health education program have been initiated in a few selected areas of the state.

Assistance was extended by this division in six Montana communities interested in the education and promotion of fluoridation.

Child Health: Staff of this division maintained membership in the State Department of Public Instruction and State Board of Health-Joint Staff Committee, Matters of mutual interest in the School Health program to the two departments are taken up by this committee.

This division participated in and assisted with eleven district meetings on "Medical & Clinical Problems of the School-Age Child" in 1955. These meetings were a part of a continuing on-the-job training program designed to improve the health of the school age child.

Extensive assistance has been extended by this division to the divisions of Child Health Services and Public Health Nursing to improve the health education aspects of the 'Education for Parenthood—Adult and High School' program, and the newly initiated speech and hearing program.

Careful advance planning between health educators, other division and program directors of the State Board of Health is designed to aid in developing more effective and extensive health education programs with the people of Montana.

Revision of the **Guide for the Montana School Health Program** for teachers, initiated in this report period, is expected to be completed in the next biennium and made available to schools and teachers throughout the state.

Local Health Services: In this biennium the health educators of this division worked in 48 of the state's 56 counties. Lay citizens and professional people, (in those eight counties in which health educators did not work) were invited to participate in group activities in neighboring counties.

In thirteen counties the work of the health educators was in preparation for intensified, county-wide, chest x-ray surveys. Emphasis, in some areas, has been on activating and organizing local health councils as a step in "helping people help themselves" with local health problems. Assistance to local public health workers has been through conferences and meetings with public health nurses and sanitarians and through staff education meetings with local full-time health departments on the health education aspects of their programs.

Disease Control: Activities in this program through August of 1955 were largely concerned with the intensified chest x-ray survey program.

The number of people x-rayed in the chest survey program was more than doubled. One of the significant factors in increasing the coverage, from 36% to 75%, was the improved community organization accomplished in each county in preparation for the operation of the mobile x-ray units.

Health educators in this division assisted local groups in planning and organizing their communities for the intensified chest survey. Other community health activities are now being patterned from these local organizations.

There has also been health education participation in the Board's disease control programs for polio vaccination, rheumatic fever and heart disease control, as well as cancer and tuberculosis control activities.

Narcotic & Alcohol Education: In this biennium assistance to the Narcotic & Alcohol Advisory Committee (to the State Board of Health) has been an activity of the health education division. After two years of study this committee reported its findings and recommendations to the 1955 Legislature.

In the first year of this report period this division participated in the School of Alcohol Studies at Montana State University. The second year, the State Board of Health directed the Summer Schools of Alcohol Studies at Eastern Montana College of Education, Billings, and at the University in Missoula.

Consultation services from this division were provided the teacher-training sections of five Montana colleges. This service in narcotic and alcohol education was extended to many of the state's high school and elementary school faculties.

There was participation in many county meetings considering the problems associated with narcotics and alcohol. Some of these meetings, on alcohol and highway safety, were planned and conducted in cooperation with the Montana Highway Patrol.

Library: A public health library is maintained by this division. It contains materials on practically every health topic. The materials are available to professional and lay citizens throughout the state. The 95 films, available on loan, in this library, were viewed by more than 16,000 people in this biennium. Other library items include approximately 3,500 books: 96 periodicals; and over 12,000 individual pamphlets.

Materials: Approximately 145,000 pamphlets on a wide range of health topics were supplied upon request. This division planned and made thirteen health exhibits in this report period.

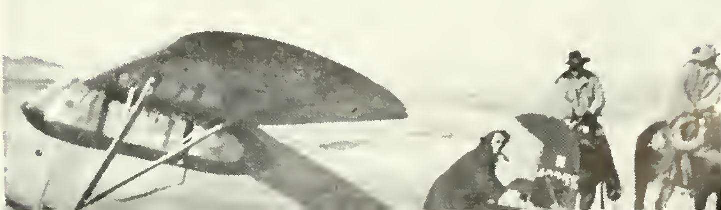
The State Board of Health's monthly bulletin, "Treasure State Health," and the biennial report to the legislature is prepared cooperatively with other program directors and distributed through this division. Circulation of "Treasure State Health" ranged from 2,100 to 3,700.

An average of from 15 to 20 news items on health topics are prepared and released to the press and radio each month.

Over 140,000 health record forms and charts were distributed from this division in the two-year period.

Field Training: During this biennium health educators from Canada, Chile, Jordan, New Guinea and the Philippines have studied and observed public health education techniques and administration, as practiced by the Montana State Board of Health. The health educators from Chile, New Guinea and the Philippines were graduate students from the California School of Public Health and the one from Jordan was a graduate student at the Minnesota School of Public Health.

A volunteer worker, using her own airplane, is pictured registering two McCone county ranchhands for the intensifed chest x-ray survey in their area. Health Educators assist groups in community organization and education in the various health programs.



Hospital Facilities

Hospital Survey and Construction. Montana's Legislative Assembly amended the Montana Hospital Survey and Construction Act in 1955 to permit Montana to participate in the Federal Medical Facilities Act. Congress expanded the original Federal Hospital Survey and Construction Act to provide assistance to states for:

1. A survey of the need for diagnostic and treatment centers, hospitals for chronically ill, rehabilitation facilities, and nursing homes.
2. Construction of such facilities through Federal Grants to public and non-profit groups.

This enabling state legislation provided for Montana to make a survey of such existing facilities and develop a state-wide plan for construction. Under the expanded program, Montana received Federal allotments of $300,000.00 for each of the fiscal years 1955 and 1956.

The Montana Medical Facilities Construction Plan, and the annual 1956 Revision of the Montana Plan for Hospital Construction, were developed with the advice of the Advisory Hospital Council. Adopted by the State Board of Health, these plans were approved by the U. S. Public Health Service on March 29, 1956.

In the hospital category, Montana received a Federal allotment of $228,439.00 for fiscal 1955 and $296,113.00 for fiscal 1956.

Federal funds are granted on a matching basis, with eligible sponsors receiving 40% of the project cost.

Projects scheduled for construction under the hospital program included: participation in the State Board of Health portion of the State Laboratory Building, Helena; an addition to provide new dietary facilities, including cafeteria, dining room, and remodeling to provide complete laboratory facilities and expanded x-ray facilities at St. John's Hospital, Helena; an addition of two rooms to provide isolation facilities at the Teton Memorial Hospital, Choteau; an addition of 25 beds and x-ray facilities at St. Peter's Hospital, Helena; replacement of the 15-bed Dahl Memorial Hospital, Ekalaka; and replacement of the 35-bed Hotel Dieu Hospital, at Polson.

Under the medical facilities program, projects scheduled for construction included: Immanuel Lutheran Home, Kalispell, a 70-bed nursing home; chronic disease, diagnostic and treatment and rehabilitation facilities at St. Vincent Hospital, Billings; and a 16-bed nursing home at Forsyth.

Montana has received $2,132,831.00 in Federal allotments for hospital construction during the period from July 1, 1947 through June 30, 1956. Payments amounting to $1,846,909.80 have been made to sponsors of hospital projects.

The balance is to be paid as work is completed on active projects.

Under the Medical Facilities program, Montana has received two allotments, totaling $600,000.00. No payments have yet been made, pending actual construction.

To date, all Federal-aid monies available to Montana, have been utilized for hospital

The State Laboratory Building (right) was the 23rd project constructed in Montana with Federal financial assistance, since 1947, under the Federal Hospital Survey & Construction Act. Of the total cost of $1,093,609.49, Federal funds, administered through the State Board of Health, covered $120,950.44 of the cost of constructing the wing used for public health laboratory activities. As the biennium ended, the building was about 95% complete.

SUMMARY OF PROJECT CONSTRUCTION SCHEDULES
June 30, 1956

Project	Location	No. of Beds	Total Estimated Cost	Estimated Federal Share	Status
I. HOSPITAL FACILITIES					
Glacier County Memorial Hospital	Cut Bank	46	$ 307,173.47	$ 101,404.72	Opened 5-21-49
McCone County Hospital	Circle	10	170,462.07	55,414.02	Opened 4-5-51
Sweet Grass Community Hospital	Big Timber	13	162,851.07	54,283.69	Opened 9-20-50
Teton Memorial Hospital	Choteau	24	208,492.36	67,202.34	Opened 6-28-51
Toole County Hospital	Shelby	30	335,066.46	111,688.82	Opened 4-20-51
Carbon County Memorial Hospital	Red Lodge	27	324,544.39	106,648.13	Opened 5-9-51
Malta Hospital	Malta	30	263,407.08	111,710.94	Opened 12-10-51
Garfield County Hospital	Jordan	22	256,011.96	107,759.84	Opened 8-1-51
Daniels Memorial Hospital	Scobey	20	263,497.51	111,749 29	Opened 4-8-52
Wheatland Memorial Hospital	Harlowton	31	271,503.30	49,850.80*	Opened 5-1-51
Roosevelt Memorial Hospital	Culbertson	10	99,859.69	36,642.16*	Opened 4-2-51
Sanders County Hospital	Hot Springs	19	255,138.42	60,000.00*	Opened 4-14-52
Fallon County Hospital	Baker	19	301,600.00	117,730.41	Opened 6-24-53
Granite County Hospital	Philipsburg	10	233,870.15	93,489.76	Opened 2-17-53
St. John's Lutheran Hospital	Libby	26	313,693.66	30,326.26*	Opened 7-1-52
Sheridan Memorial Hospital	Plentywood	21	252,703.09	50,000.00*	Opened 2-27-53
Roundup Memorial Hospital	Roundup	18	229,564.21	75,116.27	Opened 2-2-54
Livingston Community Hospital	Livingston	52	692,213.26	276,216.54	Opened 2-28-55
Columbus Hospital	Great Falls	....	60,771.29	15,000.00*	Completed
St. Ann's Hospital	Anaconda	25	1,540,775.79	138,621.25*	Completed 6-15-55
State Laboratory Building	Helena	.	1,093,609.49	120,950.44*	Approx. 95% completed
St. John's Hospital	Helena	...	340,775.26	136,310.10	Bids opened 6-28-56
Teton Memorial Hospital	Choteau	2	22,996.56	9,198.62	Contracts awarded 6-27-56
St. Peter's Hospital	Helena	25	279,088.00	111,635.20	Final dwgs. completed
Dahl Memorial Hospital	Ekalaka	15	191,303.73	75,753.33	Contracts awarded 6-23-56
Hotel Dieu	Polson	35	450,000.00	180,000.00	Planning stage
TOTAL			$8,920,972.27	$2,404,702.93	
II. MEDICAL FACILITIES					
Immanuel Lutheran Home	Kalispell	70	$ 538,263.98	$ 203,505.59	Bids opened 6-26-56
Rosebud County Nursing Home	Forsyth	16	184,455.00	56,006.00*	Contracts awarded 6-23-56
St. Vincent Hospital	Billings	....	974,038.00	227,857.20*	Adv. for Bids
TOTAL			$1,696,756.98	$ 487,368.79	

* Participation in portion of project only.

and medical facilities construction. Requests for financial assistance have exceeded available monies.

Licensure of Hospitals and Homes for the Aged. Revised Montana hospital licensing standards became effective July 1, 1954. In establishing the revised standards, the State Board of Health adopted a Resolution, that "All licenses issued for the fiscal year 1955 be on a provisional basis unless records of the Montana State Board of Health clearly indicate that all aspects of these provisional standards are met, and in order to give all hospitals one year to meet any standard heretofore not required."

As a result of the revised standards approximately sixty percent of the hospital licenses issued were on a provisional basis. In addition to immediate requirements, the standards outlined requirements affecting the physical plants. Hospitals deficient in certain requirements have been given through June 30, 1959, to conform with the revised standards.

Considerable progress has already been achieved in meeting these requirements. Because of obsolescence in construction, some hospitals are considering replacement on or before June 30, 1959.

As of June 30, 1956, 66 general hospitals with 3,674 beds, 1 tuberculosis hospital with 283 beds, 1 mental hospital with 1,620 beds and 6 convalescent homes with 394 beds were licensed, by the State Board of Health. During the same period 87 boarding and or nursing homes for the aged with 1,441 beds were licensed.

Inspections for licensure have been made by a Hospital Nursing Consultant on a part-time basis, along with other duties. The work load permits only one inspection of each facility each year. Hospitals and homes presenting special problems receive more frequent inspections. It is recognized that more frequent inspections are needed to determine that licensing requirements are met. Services of other divisions of the State Board of Health are utilized when required.

Local Health Services

In Montana distances are great and population scattered. To provide public health services on the local level is difficult for many Montana communities.

Full-time Health Departments: However, Cascade County and the City of Great Falls have carried on an effective, well-rounded program of public health through their city-county health department for 36 years. Gallatin County and Bozeman established their city-county health department in 1929.

Health District No. I is composed of Rosebud and Big Horn Counties. Organized in 1952, this Health District includes the Crow and Tongue River Indian Reservations. Through contracts with the Division of Indian Health of the United States Public Health Service, the Indian reservations are taking added responsibility in the district health departments' programs.

Health District No. II includes Lake and Sanders Counties and the Flathead Indian Reservation.

Missoula and Mineral Counties organized Health District No. III. The broader financial and population basis of this two-county district aided in developing a more sound and effective public health program for the area in fiscal 1954-55. At the end of fiscal 1955, the district was dissolved when the Missoula County Commissioners withdrew. Missoula continued with a budget for a full-time health department but it was not implemented, and Mineral County maintained the services of a part-time health officer and a part-time nurse.

Unorganized Areas: In 27 counties of Montana, local public health nurses, and sanitarians are employed. Eleven of these counties function with financial assistance from the State Board of Health.

All local public health nurses are under the supervision of the Division of Public Health Nursing. Nursing consultants of the State staff assist and cooperate closely with local public health nurses. Three health education consultants assist local citizens organize community health groups designed to improve local public health activities. In the Division of Environmental Sanitation a consultant in general sanitation serves as a consultant to local sanitarians and engineers with local communities' sewage, water and other similar public health activities.

Consultant Services: This division is responsible for coordination of consultant services of the State Board of Health to local areas. Each division provides consultant services to local public health workers; some consultant services are on a continuing basis, others are provided upon request.

Personnel: Montana and local health departments are competing against the nation for qualified public health personnel. The demand for public health workers is greater than the available supply.

Montana's Joint Merit System is responsible for a system of uniform standards for public health workers. Qualifications for nurses, sanitarians, engineers, dentists, physicians and other public health workers at the state and local level are subject to review, evaluation and approval of the Joint Merit System.

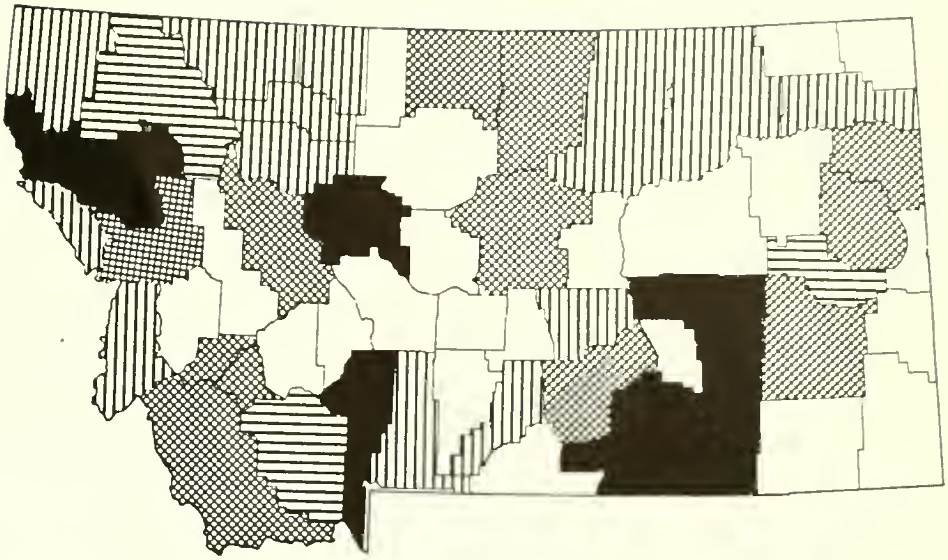
In most areas of Montana, public health workers are covered by the Public Employees Retirement System and also come under the Federal Social Security Program.

In recruiting for Montana's public health needs, young people of the state should be encouraged to complete their education in the public health disciplines: physicians, nurses, engineers, health educators, bacteriologists, sanitarians, etc.

Many Montana communities have active health councils studying their local needs.

The primary responsibility of this division is aiding local areas in meeting their public health needs. Here the Director of the Division of Local Health Services (right center) meets with some of the Executive Board of the Flathead County Health Council to aid in planning and study of local public health needs.

Budgeted Local Public Health Positions
Montana—July 1, 1956



Budgeted Local Health Positions. Montana — July 1, 1956.

These councils are composed of lay citizens, representatives of medical and dental societies, and other professional health workers, and voluntary health associations, interested in promoting understanding of public health conditions and local public health needs.

Financial Aid: Financial assistance extended to counties by the State Board of Health is designed to aid local areas in establishing and improving public health programs.

This aid is not intended as a continuing subsistence to the local area. Assistance is greatest in the early years of the country's efforts at developing effective public health. As the local program develops and public health becomes better established in the area, the amount of financial aid is reduced unless the program is improved.

Each year the financial assistance to counties is established on the basis of each area's financial needs and their efforts to meet their public health needs. This is in line with the philosophy that the funds be used in encouraging and assisting local areas to meet their public health needs by "helping them help themselves."

In this two-year period, $89,891.88 was administered through the State Board of Health in this program of aid to counties. In 1954-55, eighteen counties received $54,240.56. The following year 1955-56, seventeen counties received $34,651.32 under this program. Of this $19,589.24 decrease, $14,000.00 was a reflection of the State Board of Health's reduced budget.

During fiscal 1955-56, the U. S. Public Health Service Division of Indian Health contributed to the budget for Montana Public Health Districts No. I and No. II. As this report period ended, in the summer of 1956, the State Board of Health and the USPHS Division of Indian Health were developing contracts and agreements that would provide Federal funds for use in local areas with heavy Indian populations. These funds will be administered through the State Board of Health's Division of Local Health Services, for use in improving local public health programs.

DISTRIBUTION OF LOCAL PUBLIC HEALTH PERSONNEL
June 30, 1956

	Counties	Percent of Population
Organized Units (full-time)	7	25
Personnel in unorganized areas	27	62
Part-time health officer only	22	13

PUBLIC HEALTH AT THE GRASSROOTS IN MONTANA
Budgeted Positions
June 30, 1956

	Full Time	Part Time	Organized Health Depts.	Unorganized County	Unorganized City	Schools Only	Industry Only	TB Only	Indian Only
Physicians	4	76	5	49	26		.	..	....
Nurses	64	8	19	32		11	5	2	3
Sanitarians	18	1	5	12	2		. .	.	..
Sanitarian Aides	6	...	. .	...	. .	.	....	....	6
Clerks	10	—	5	5	—	....	. . .	....	....

Public Health Nursing

Public Health Nursing practices have changed, but the fundamental role of the Public Health Nurse as the family advisor continues to be one of the basic methods used in public health and public health nursing.

The major tasks of the public health nursing division are: (1) to recruit for both state and public health nursing services and to approve all credentials; (2) to maintain a high standard of public health nursing performance through supervision and consultant services; (3) to assist in the development and improvement of public health programs.

Recruitment: Recruitment continues to be the least rewarding of all our responsibilities. During the report period, our state staff has continued to remain the same with four of our consultant positions filled and two vacant. Competition in nursing fields is greater every day, as well as the competition for women in other fields. Nurses are being employed in fields requiring less preparation and experience at the same or better salaries. Besides the special preparation required for public health nurses, experience for supervisory and consultant positions is required. The initial investment of an automobile required for all positions loses nurses to other positions. Travel distances keep personnel away from home, making it impossible for nurses with families to accept these positions.

If the positions were filled, and at least two supervisors added to the state staff, recruitment for local areas could have more emphasis. Local employing agencies should have more assistance in planning for adequate stable local budgets, provisions for edcational leaves and in-service education for their nurses, in addition to the services given for program planning and in improving the quality of the services to the community.

Montana's recruitment for public health nurses would benefit by:

1. More study and better evaluation of the varied educational backgrounds of nurses as they relate to public health, with both a short and a long-term plan to fill positions and qualify nurses as needed.

ORIENTATION: Nursing techniques are demonstrated to local field nurses as a part of group conference for in-service education.

2. Organization of more full-time health departments to provide stabilization of local public health nursing services, decreasing the amount of supervisory time for State staff.

3. Better reimbursement policies for transportation.

4. An accredited public health nursing course in Montana, making this special education less expensive to the individual and communities.

Assistance from a state committee interested in the problem of recruitment proved difficult. Members already burdened with full-time jobs were unable to give enough time for the needed leadership. This approach, however, is the best approach to the problem. The state committee activities should be strengthened. A priority must be given by this Division if a committee and communities are to be helped in their strategic role in providing local public health nursing services.

Supervision: Supervision is given to all nursing in State public health programs and to all local public health nurses in areas without full-time health departments.

The cumulative effects of demands on this division, with continued vacancies, decrease efficiency.

To assure the best supervision, integration of resources through the contributions of other disciplines has been utilized. Health

RECRUITMENT: Public Health Nursing Consultant talks with student nurses about Public Health Nursing as a career.

SUPERVISORY VISIT: Guidance is given to a local public health nurse. Visits are planned to provide staff relationships not otherwise available.

educators, physicians, and specialized consultants in their fields have contributed through planned activities.

Consultation: Consultation has been directed towards groups in both state and local programs, instead of to individuals whenever possible. This development is more effective and efficient.

A nursing consultant has begun assignment in the Disease Control Division during the last year. Nursing consultant services are also being continued permanently in Child Health and Hospital Facilities.

Major contributions from this division have been made in the development and improvement of the Cleft Palate and Cerebral Palsy programs; in Parent Education; Survey of Newborns; Premature and Infant Care; and Nursery Facilities.

KEEP UP-TO-DATE: Small groups of nurses discuss Cancer Nursing at one of the six Workshops held in the State in February, 1956. Hospital, office and public health nurses attended these Workshops.

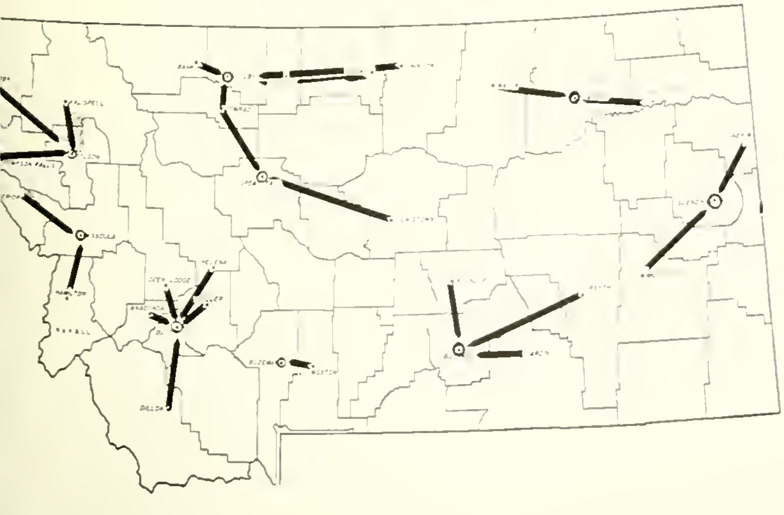
Education: Emphasis has been put on education in order that responsibilities to the citizens of the state can be fulfilled.

Joint sponsorship with the Montana Tuberculosis Association, the Montana Division of the American Cancer Society the Montana League of Nursing, and the State Department of Mental Hygiene, have made possible nine two-day work conferences in cancer, tuberculosis and mental hygiene. Specialized consultants have been brought into the State through the facilities of the sponsoring agencies. Only with the financial assistance of the Montana Tuberculosis Association and the Montana Division of the American Cancer Society were some of these conferences possible.

These meetings were for both hospital and public health nurses and reached approximately 475 nurses. In addition to these educational programs, area conferences for nurses have been held on tuberculosis control, school health and education for parenthood.

In this two-year period, academic education has been provided for 17 nurses through stipend assistance. This training included basic public health nursing and special courses in premature care.

Stipends for public health nursing training will have to be increased in the future because of (1) the increasing demand for public health nurses throughout the nation; (2) the increasing specialized requirements for nurses in public health and (3) vacancies due to earlier marriages and family responsibilities.



AREA STAFF CONFERENCES: Individual nurses become members of a group and distances shorten when staff conferences are held in strategic centers. This makes for a better learning experience for the nurses, effective use of supervisory time and economical use of budgets for travel and per diem.

If you would like additional details regarding the work of any division or section, inquiries should be directed to:

STATE BOARD OF HEALTH
Helena, Montana

Two grade-school children receive their shots of polio vaccine at a public health immunization clinic. By July of 1956 an estimated 62,000 Montanans had been immunized against polio

28th biennial report

MONTANA | STATE BOARD OF HEALTH

HELENA, MONTANA

1954-1956

A volunteer worker makes a house-to-house call to register a Montanan for a chest x-ray at one of the mobile units operated in the intensified, state-wide chest survey. Work of such volunteers was instrumental in success of the chest survey, that ended in August of 1955. Approximately 343,000 Montana adults (12 and older) were x-rayed in the survey. This represents 75% of the eligible population.

A speech therapist at the Montana Cerebral Palsy Center, Billings, helps a child in a speech training session.